WORDSTAR®

Training Guide

WORDSTAR QUICK REFERENCE

NO-FILE MENU

D	Open a document file
E	Rename a file
F	File directory on/off
H	Set help level
L	Change logged disk
M	Run MailMerge
N	Open a non-document file
O	Copy a file
P	Print a file
R	Run a program
S	Run SpellStar
X	Exit to operating system
Y	Delete a file

MAIN MENU

Cursor Movement

^A	Left word
^D	Right char
^E	Up line
^F	Right word
^S	Left char
^X	Down line

Scrolling

^C	Up screenful
^R	Down screenful
^W	Down line
^Z	Up line

Basic Editing Commands

^DEL	Delete char left
^G	Delete character
^T	Delete word
^Y	Delete line

Miscellaneous

^B	Reform paragraph
^I	Tab right
^L	Find/replace again
^N	Insert a RETURN
^U	Stop a command
^V	INSERT ON/OFF
RETURN	End paragraph

Other Menus

^J	Help menu
^K	Block menu
^O	Onscreen menu
^P	Print menu
^Q	Quick menu

HELP MENU

^B	Paragraph reform
^D	Dot commands, print controls
^F	Flags in right-most column
^H	Display and set the help level
^M	Margins & tabs
^P	Place markers
^R	Ruler line
^S	Status line
^V	Moving text

QUICK MENU

Cursor Movement

^QB	Block beginning
^QC	End of file
^QD	Right end line
^QE	Top of screen
^QK	Block end
^QP	Position before previous command
^QR	Beginning of file
^QS	Left side screen
^QV	Start of last find/replace
^QW	Continuous up scroll
^QX	Bottom of screen
^QZ	Continuous down scroll
^Q0-9	To marker 0-9

Delete

^QY Delete to end of line
^QDEL Delete to beg. of line

Miscellaneous

^QA Find & replace
^QF Find
^QL Find misspelling
^QQ Repeat command

ONSCREEN MENU

Margins & Tabs

^OF Ruler from line
^OG Paragraph tab
^OI Set tab
^OL Set left margin
^ON Clear tab
^OR Set right margin
^OX Release margins

Line Functions

^OC Center text
^OS Set line spacing

Toggles

^OD Print control display
^OE Soft hyphen entry on/off
^OH Hyphen help on/off
^OJ Justification on/off
^OP Page break display on/off
^OT Ruler line on/off
^OV Vari-Tabs on/off
^OW Word wrap on/off

BLOCK MENU

Saving Files

^KD Save, done edit
^KQ Abandon edit
^KS Save and resume
^KX Save and exit

Place Markers

^K0-9 set/hide place markers

Block Operations

^KB Mark block beg.
^KC Copy block
^KH Hide/display block
^KK Mark block end.
^KN Column mode on/off
^KV Move block
^KW Write block
^KY Delete block

File Operations

^KE Rename file
^KJ Delete file
^KO Copy file
^KP Print file
^KR Read file

Disk Operations

^KF File directory on/off
^KL Changed logged disk

PRINT MENU

Special Effects
(begin and end)

^PB Boldface beg./end
^PD Double strike beg./end
^PS Underscore beg./end
^PT Superscript beg./end
^PV Subscript beg./end
^PX Strikeout beg./end

Special Effects
(one time each)

^PF Prints ¢
^PG Prints ¬
^PH Overprint next char
^PO Non-break space
^PRETURN Overprint line

Printing Changes

^PA Alternate pitch (12)
^PC Print pause
^PN Standard pitch (10)
^PY Ribbon color changes

DOT COMMANDS

.BP Bidirectional print on/off
.UJ Microjustify on/off
.PO Page offset
.CW Character width
.IG or .... Comment (not printed)
.CP Conditional page
.FO Footing
.FM Footing margin
.HE Heading
.HM Heading margin
.LH Line height
.MB Margin at bottom
.MT Margin at top
.PA New page
.OP Omit page number
.PN Page number
.PC Page no. column
.SR Sub/superscript roll
.PL Paper length

MAILMERGE DOT COMMANDS

.DF Data file
.RV Read variable
.RP Repeat
.SV Set variable
.AV Ask for variable value
.DM Display message
.CS Clear screen
.FI File insert
.PF Print-time line formatting
.RM Right margin
.LM Left margin
.LS Line spacing
.OJ Output justification
.IJ Interpret as justified

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Welcome to Wordstar

You are about to learn a system that will make typing much easier and more enjoyable for you. This guide will lead you step by step through all the basic procedures. In no more than two work days, you will get to practice every major feature of WordStar. (You may want to spread the two days over a week or so, rather than take this course all at once.)

This guide is divided into three parts:

- Short Course (Lessons 1-6)
- Intermediate Course (Lessons 7-12)
- Extended Course (Lessons 13-20)

If you plan to type ordinary letters, you may find all you need in the Short Course, which should take you about three or four hours to complete. If your typing tasks involve formatted pages, tables, scientific symbols, special headings, searching, or extensive rearranging of text, take the Intermediate Course (about four or five more hours). The Extended course (about another seven or eight hours) covers WordStar's many features for print formatting, especially in longer documents; MailMerge's ability to merge text, chain-print, and produce form letters; and SpellStar's aid in finding and correcting misspellings and typos in text files.

Since the lessons follow a certain order, you will have to complete them in sequence. You can go through the exercises very quickly if you wish. Or you can take time to repeat them if you need more practice. Just remember that many lessons require prior completion of earlier lessons in the guide.

There are about 50,000 different Chinese characters. But it has been said that with a knowledge of only 1,200 of them, you could read 95% of all Chinese writing. WordStar is nowhere near as difficult as Chinese, but it's the same idea: Even though there are a lot of WordStar features, you don't need to know all of them to be able to use WordStar.

Anything new seems unfamiliar at first, so it may take time to get used to the way WordStar works. But once you do, you will be happy to find how much simpler your work has become.

1. Press Y, for "Delete a file."
2. When the prompt NAME OF FILE TO DELETE? appears, type B:SPELSTAR.NEW, and press RETURN.

Now do the same thing for EMPLOYEE.SUP.

1. Press Y, for "Delete a file."
2. When the prompt NAME OF FILE TO DELETE? appears, type A:EMPLOYEE.SUP, and press RETURN.

Remember, in normal maintenance, when you update a dictionary, you keep the new one and delete the old one. You've done just the opposite here—so that you can repeat this lesson if you wish.

End of the Extended Course

This concludes the Extended Course. By now you have become acquainted with every major WordStar feature. Here is a brief summary of what you have learned:

Lesson 13. You learned how to set conditional and unconditional page breaks for documents longer than one page.

Lesson 14. You learned how to add page headings and footings to a document to be printed, as well as how to print selected pages, pause for paper changes, and suspend a print job.

Lesson 15. You learned how to type the matrix and the data file for a form letter, with names and addresses inserted from the data file.

Lesson 16. You learned how to address envelopes, print mailing labels, format your data file, and how to combine several printing jobs into one.

Lesson 17. You learned how to type the matrix and several nested files for a letter of reply.

Lesson 18. You learned how to print a number of files in succession from a single command file (chain-printing) and how to print multiple copies of a document.

Lesson 19. You learned how to check a document for misspellings, correct errors, and set aside words to add to a dictionary.

Lesson 20. You learned how to run all SpellStar's dictionary maintenance operations—adding words, deleting words, combining add/delete, and creating a new dictionary.

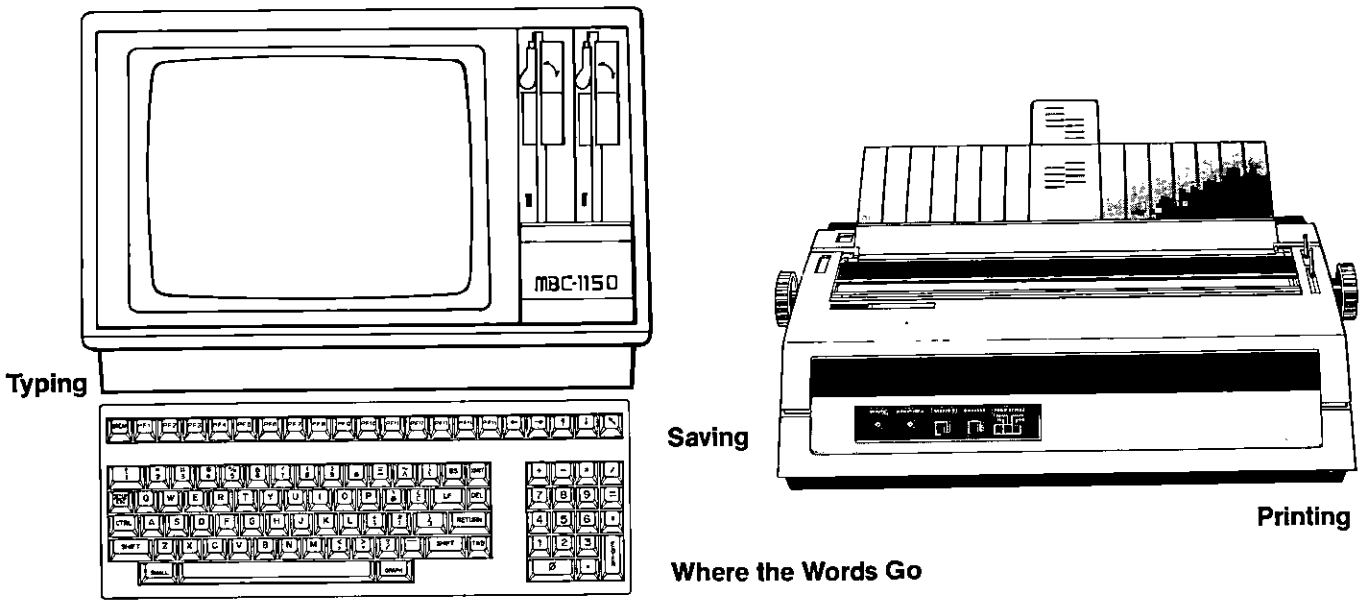
You have created the following files:

PRACTICE (Lesson 2)
DISPLAY (Lesson 7)
X (Lesson 12)
DATASTAR (Lesson 13)
ENVELOP3 (Lesson 16)
COMBINE3 (Lesson 16)
RADIO (Lesson 17)
GUIDE1 (Lesson 18)
PRINT01 (Lesson 18)

LETTER (Lesson 3)
TABLES (Lesson 8)
Z (Lesson 12)
MAILING3 (Lesson 15)
LABEL3 (Lesson 16)
REPLY (Lesson 17)
TV (Lesson 17)
GUIDE2 (Lesson 18)
PRINT02 (Lesson 18)

CONTROL (Lesson 6)
SPECIAL (Lessons 9)
Y (Lesson 12)
LIST3.DAT (Lesson 15)
FORMAT3 (Lesson 16)
HEADING (Lesson 17)
STEREO (Lesson 17)
GUIDE3 (Lesson 18)
WORDS (Lesson 20)

If you plan to repeat any of these lessons or you have no further use for these files, you may want to delete them now.



Storing Text

Before you can enter text using WordStar, you have to create a file for storing the text. (If you plan to enter ordinary text, it will be a **document** file; if you plan to enter a data file or a computer program, it will be a non-document file.) You can think of this file as similar to a cabinet file, in that you can store in it any amount of information up to the limits of the system. Anything you store, you can later retrieve, and either add to or take from.

When you create a file, you must give it a name. And you must remember the exact name you give your file so you can go back to it again later. Any time you decide to make changes to your file or to print it, WordStar will ask you for the file's name. If you forget the name of your file, you can always look at the directory on the screen to find it again.

Naming Files

Here are some examples of file names you can use:

NEWSALES	Newsales	newsales	(equivalent)
LIST/497	List/497	list/497	(equivalent)
LETTER04	Letter04	letter04	(equivalent)

A file name may contain from one to eight characters, including letters, numbers, and some special characters (colons, periods, and asterisks are not allowed). WordStar makes no distinction between upper and lower case letters of the alphabet. That's why "Z" and "z," for example, are equivalent file names.

If you need to give more information about the file, you can also add a period and three more characters to the end of the name. Some examples are .TXT (for text) and .DOC (for document):

NEWSALES.TXT	Newsales.Txt	newsales.txt	(equiv)
LIST/497.DOC	List/497.Doc	list/497.doc	(equiv)
LETTER04.LTR	Letter04.Ltr	letter04.ltr	(equiv)

Backup Files

Any time you finish a typing job under WordStar, you have to save your typing (store it in a file). And whenever you save your typing, WordStar creates for you another file to back up your current file. This other file, called the backup file, contains the last version of your file, and ends in .BAK. For example, if you had a file named LETTER04 (or LETTER04.LTR), WordStar would call its backup file LETTER04.BAK.

If you should somehow lose a file, you can always restore it from your backup file. This is the purpose of the backup file— to back you up if something goes wrong. (Once again, the backup file will contain everything but your most recent changes). You will learn how to restore a lost file in Lesson 12.

Learning as You Go

If you don't understand some of the things discussed above or in Lesson 1, it doesn't make any difference. How WordStar works, how a computer works, how text can be stored on a little piece of plastic—these are things you don't even have to think about. The discussions here are just to give you a rough idea of what is going on when you start typing. Whatever you need to know, you will learn through practice at the keyboard.

Another thing: If you feel uneasy about the thought of dealing with a computer, you don't have to. Going from a typewriter to a computer is probably no more challenging than going from a bicycle to a car. The car has more switches, dials, and lights than the bicycle, and there's more to learn. But the car will take you where you're going a lot faster, especially if it's very far away. You can make mistakes on a computer, but (as long as you don't pick it up and hurl it out the window) there's no way you can damage it. So put yourself at ease and start enjoying all the conveniences your computer is bringing to you.

```
SpellStar — Dictionary Maintenance

      DICTIONARY MAINTENANCE CONTROLS          CURRENT VALUE
F —  Change word file to use                 = A:SAMPLE .ADD
D —  Change dictionary to update             =
U —  Change name of new or updated dictionary = A:EMPLOYEE.SUP
W —  Change work drive for sort              =        B:
      DICTIONARY MAINTENANCE OPTIONS

N —  Create a new dictionary                 = YES
A —  Add words                               = YES
T —  Delete words                            = NO
C —  Combine add/delete                      = NO
S —  Use "S" words from .ADD file            = YES
L —  List dictionary words                   = NO

<Return> —  Start dictionary maintenance.
   X     —  Exit to Operations Menu

Control or option to change? ■
```

Press RETURN to begin the operation.

Now SpellStar is creating a supplemental dictionary for you. Read on while it does that.

If you already had a supplemental dictionary for employee's names and you were adding to it from your .ADD file, you would have named EMPLOYEE.SUP as the dictionary to update, leaving the "new or updated dictionary" control blank. You would have selected A for "Add words" and S for "Use 'S' words from '.ADD' file" as the maintenance options.

Deleting Words from a Dictionary

You're not going to practice deleting words in this lesson; this section will simply describe how you delete words from any dictionary when you want to.

First open a file with WordStar's D command ("Open a document file") and put into it all the words you wish to delete, in any order. You can use .DEL as this file's extension if you like. SpellStar doesn't require delete files to be named any special way, but it may help you recognize that file more quickly.

When you've saved that word file with KD, you'll be at WordStar's "editing no file" menu again. Select "S"; when the NAME OF FILE prompt appears, enter the name of the word file you just created. Select M at SpellStar's Operations menu; on the Dictionary Maintenance menu, select T, "Delete words", as the maintenance option. (Naturally, you'd name the dictionary from which the words would be deleted as the " dictionary to update".)

Combined Add/Delete Maintenance

You'll practice one more dictionary maintenance operation before ending this lesson: the "Combine add/delete" step. This can be a real timesaver, letting you do two maintenance operations in one step.

In your last exercise, you created a new supplemental dictionary. Now that SpellStar has finished that, you should see the following message at the bottom of your screen:

```
SpellStar has completed the dictionary maintenance.
Enter Return to return to WordStar, "R" to restart.
```

In other practice steps, you've pressed R to go to Spellstar's Operations menu, but you won't do that this time. Even though you're going to do another maintenance operation, you will need a file to work with, and you'll create that with WordStar.

1. Press RETURN to go to WordStar's "editing no file" menu.
2. On the "editing no file" menu, press D to "open a document file."
3. When the prompt NAME OF FILE TO EDIT? appears, type Words, and press RETURN.
4. When the main help menu appears, type these words in a list (don't worry about format or spacing):

   fattest
   peachy
   bunnies
   cub
   hobo
   annul
5. When you've entered all the words press CTRL KD (^K^D) to save the file.
6. When the "editing no file" menu appears, press S, for "Run SpellStar."
7. When the prompt NAME OF FILE TO CHECK / ADD TO DICTIONARY? appears, type Words, and press RETURN.

Short Course

1 Getting Acquainted with the Equipment

The Keyboard
The Screen
Diskettes and Disk Drives
The Logged Disk Drive
The Printer

2 Some Basics

Starting Your Computer
Starting WordStar
Stopping WordStar
Stopping Your Computer

Help from WordStar
Help Levels
Selecting a WordStar Function
Recovering from Errors

3 Typing a Letter

Preliminary Adjustments
A Letter With Mistakes
Correcting "july"
Correcting "somers"
Inserting a Space before "President"
Correcting "mr."
Correcting "should"
Emphasizing "all"
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4 Moving the Cursor

Moving the Cursor One Position
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Moving to the Edges of the Text Area
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Inserting New Sentences

Deleting a Character
Deleting a Word
Deleting a Line
Deleting to the Right
Deleting to the Left

Copying a Paragraph
Deleting a Paragraph
Moving a Paragraph
Inserting "P.S."
Printing Your File
Summary

6 Forming Paragraphs

Typing Separate Paragraphs
Joining Paragraphs
Splitting a Paragraph

Changing to Indented Paragraphs
Hyphenating Words During Reform
Rejoining Paragraphs
Printing Your File

Printing Double-Spaced, Unjustified
Line Spacing and Justification

(Notice that the words in the dictionary are arranged alphabetically by length of word. So if you are looking for a word in your dictionary, count the letters and look for it among words of that length.)

The numbers flashing by in the third and sixth lines of your on-screen summary tell you how many dictionary words SpellStar has gone through in its updating process, and how many words it has added or deleted.

When SpellStar has finished adding words to the dictionary, it will show you this message below the summary:

```
SpellStar has completed the dictionary maintenance.
Enter RETURN to return to WordStar, "R" to restart.
```

You can exit to WordStar's "editing no file" menu by pressing RETURN, or go to the Operations Menu with "R" if you want to do another spelling check or maintenance procedure.

In this case, you press "R" to go back to SpellStar's Operations Menu, since you're going to practice another maintenance run.

Remember that SAMPLE.ADD still contains words that you decided, during the spelling check of SAMPLE.TXT, you wanted to add to a supplemental dictionary containing names of employees of Calvin Hotstuff's company.

Of course, you knew at that time that such a dictionary didn't exist. Now you'll create a new supplemental dictionary called EMPLOYEE.SUP, using the words you "marked" with an "S" in SAMPLE.TXT.

Creating and Updating a Supplemental Dictionary

First, we'll go back to the Dictionary Maintenance Controls and Options setup.

1. Press M, for "Maintain dictionary," on the Operations Menu.
2. Study the current values on the Dictionary Maintenance Controls menu. The word file to use is still SAMPLE.ADD, since you used that last time. That's what you want, so go right past it, without doing anything to the F control.

You don't need a dictionary to update for this operation, so

1. Press D, for "Change dictionary to update."
2. Press SPACE BAR and RETURN to erase name of dictionary to update.

Now put in the name of the new dictionary.

1. Press U, for "Change name of new or updated dictionary." You'll see B:SPELSTAR.NEW as the current value.
2. Type A:EMPLOYEE.SUP. Press RETURN. (Remember - you can use your backspace key to erase if you make a mistake while entering a new control value.)

For W, "Change work drive for sort," you can leave the current value as is.

Now you want to set up the Dictionary Maintenance Options.

1. Press N for "Create a new dictionary."
2. Press Y in response to the Y/N prompt.

The current value for A, "Add words," is already YES, from your last operation. If it had been NO, your selection of N, for "Create a new dictionary," would have changed it automatically to YES.

Make sure the current values for the T and C options are NO.

Tell SpellStar to use words you marked in SAMPLE.TXT as ones to be added to a supplemental dictionary.

1. Press S, for "Use 'S' words from .ADD file."
2. Press Y, in response to Y/N prompt at bottom of screen.

You won't list dictionary words this time, so

1. Press L, for "List dictionary words."
2. Press N in response to the Y/N prompt.

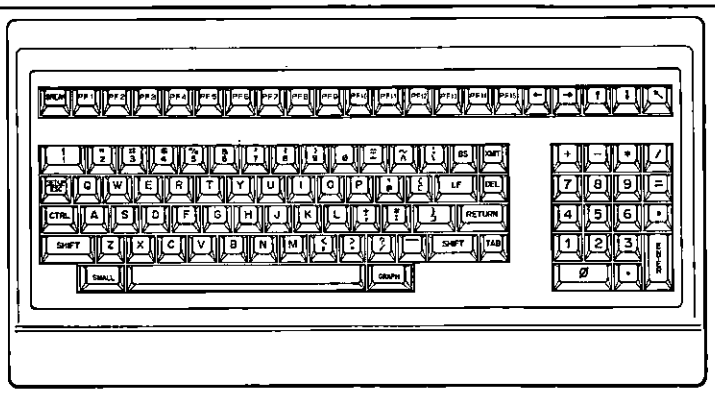
Your Controls and Options should look like this:

Lesson 1
Getting acquainted with the equipment

In this lesson you are going to become familiar with your computer and the equipment connected to it.

The Keyboard

The keyboard for your computer probably looks a lot like the keyboard of your typewriter. The keys for letters and numbers are in the same locations and look the same. But there are a few other keys that you may not have seen before. A typical keyboard with these keys is shown below. Your own keyboard may be a little different.



Typical Keyboard

Take a look at your own keyboard and find where the following keys are located: RETURN, SHIFT, CTRL (CONTROL), and ESC (ESCAPE). You will be using these keys fairly often, so take a moment to locate them now. (On some keyboards, the RETURN key may be called ENTER or NEW LINE.)

The Screen

The typing you do at your keyboard will appear first on a video screen, not on a sheet of paper. But unlike a sheet of paper, your screen will give you helpful information. For example, after you start typing, it will tell you the name of your file, your current page, line, and column in the file, and prompts to help you along.

In the next lesson you will get your first chance to look at an actual screen display. For now, it should be enough to mention that the screen shows you information displays, error messages, and the text you are typing. To help you find your place, you will find a special character called the cursor at the location on the screen where you will type next.

Diskettes and Disk Drives

All your files will be stored on diskettes, including text files and any data files you may require. For that matter, WordStar's program files are also stored on a diskette. A disk file can hold either text, data, or a computer program. You can have WordStar's files and your typing files together on the same diskette, or you can have WordStar's files on one diskette and your typing files on another. Make sure you ask someone how the files are stored for your system. One typical set-up would be for you to have one WordStar disk, one working disk, and several backup disks kept on a shelf for emergencies. (The more you work with computers, the more you will learn to value backup disks.)

When you insert a diskette into one of those slots, you are placing it under the control of one of the system's disk drives. The disk drive actually spins the diskette at high speed, somewhat the way a record player spins a record. While the diskette is spinning, the system can either read files from it or write files onto it. (But you don't have to be concerned about this— it's all automatic.)

Be careful never to insert or remove a diskette while WordStar is busy. Make sure WordStar has completed an operation entirely, then deal with the

Bypass S for "Use "S" words from ".ADD" file," too; for this step, we want SpellStar only to add the "D" words from SAMPLE.ADD to the main dictionary.

SpellStar selects only the right ones—those "marked" with a "D" during corrections to SAMPLE.TXT - even though the SAMPLE.ADD file now contains words that you specified for both a main and a supplemental dictionary.

Your last action is to tell SpellStar to list the words it found in SAMPLE.ADD to add to the main dictionary, while it's updating your dictionary. It will also list the words in the updated dictionary. Let's see how that works.

1. Press L for "List dictionary words." Read the message at the bottom of the screen.
2. Press Y, in response to the Y/N prompt.
3. Everything is ready to go. So press RETURN.

Here's what you should see on the screen:

```
SpellStar is now creating or updating your dictionary:

     Number of words in word file .....: 5
     Number of different words in word file .....: 5
     Number of words in dictionary being updated. :
     Number of words added to dictionary .....:
     Number of words deleted from dictionary ...:
     Number of words in new or updated dictionary:

                [List of update words]

ATTN DISCO TYPOS DISCOS JUMPSUIT


Enter <Return> to proceed, "R" to restart.
```

First, SpellStar counts the "D" words in your file; then on the second line it tells you how many of those are different words. (Often those two numbers will be the same, but when you use a document for a word file, or add the same words more than once, there will be duplicate words, and the numbers will be different.)

SpellStar will fill in the other numbers later.

Below the summary, SpellStar lists the words it will add to the dictionary.

(Once you're using SpellStar regularly, you'll find this listing of words to be a handy double-check. When SpellStar shows you the list, you can make sure these are really the words you want added to the dictionary. If they are not, you can press R for "restart", which will take you back to the SpellStar Operations Menu. From there, you can go to the Maintenance Controls menu and choose another word file.)

You do want to add these words, so

1. Press RETURN, to proceed with dictionary maintenance.
2. Watch the numbers appear in the remaining lines of the on-screen summary.

Now SpellStar will begin to list, by screenful, the words that will be in your dictionary after it's updated by this run. SpellStar stops updating for as long as you want to look at this list. When you're ready, you can go on to the next screenful of words, or you can make the list scroll continuously. You can also stop listing words entirely and SpellStar will go on updating.

The message line under the listing shows you the commands to see the next screenful, to make it scroll continuously, or to stop it.

1. Press SPACE BAR, and look at the next list of words.
2. Press C to make the list scroll continuously.
3. Press CTRL L (^L) to stop the list.

Now SpellStar goes ahead with the update. Notice that the updating goes faster when the listing is stopped. If at any point you want to begin listing words again, just press CTRL L (^L) again and it will pick up wherever SpellStar is in the dictionary.

diskette. You will be able to tell by looking at the screen. Whenever WordStar is in the middle of a task, it gives you a message to let you know (WAIT, COPYING . . ., SAVING . . . , and so on). Just wait until the message leaves the screen before doing anything with the diskette. Also, never turn off your computer while a diskette is engaged.

Whenever you are going to be away from your terminal for more than a few minutes, make sure Wordstar is idle, then remove your diskettes and return them to their protective envelopes. Never leave them unattended in the disk drives for very long.

Care of Diskettes

The diskettes that you will be using to store typing require special care in handling. If you aren't careful with them, you risk losing the information stored on them. Always follow these rules:

- Keep them in their protective envelopes any time you aren't using them.
- Avoid bending them.
- Insert them into disk drives carefully.
- Don't touch the area of the diskette that is exposed through the window of the envelope.
- Don't expose them to temperature extremes or magnetism.

The Logged Disk Drive

Each disk drive has a one-letter name, followed by a colon. If your system has two disk drives, they will probably be called A: and B:; if it has four, the other two will probably be called C: and D:. When you start up WordStar, the computer will read the program into its memory from drive A:. Disk drive A: is said to be the logged disk drive, the one the computer is currently looking at. (You can tell by the A prompt that appears just before you ask for WordStar. A means A: is logged.)

If you want to ask for a file that is not stored on the logged disk, you have to type the name of the drive in front of the file name (e.g., B:TEXTFILE instead of TEXTFILE). To avoid this inconvenience, you can change the logged disk drive. The simple procedure is given in the next lesson.

The Printer

When you type on a typewriter, a paper copy is produced at the same time you are typing. When you use a word processing system like WordStar, printing a paper copy is a separate task from typing at the keyboard. With WordStar you first type your text at the keyboard, next store your text on a diskette, and then print a paper copy on a printer. This printer must be connected to your computer and turned on, with its paper loaded and adjusted, before you can print your document. Ask someone to show you how to load the paper, adjust it in the platen, and change ribbons before you start printing anything.

3. Type B to change the work drive. You do not need to press RETURN.

The current values for the controls on this dictionary maintenance run should look like this:

```
SpellStar — Dictionary Maintenance

F — Change word file to use                    = A:SAMPLE .ADD
D — Change dictionary to update                = A:SPELSTAR.DCT
U — Change name of new or updated dictionary   = B:SPELSTAR.NEW
W — Change work drive for sort                 =        B:
```

Dictionary Maintenance Options

Now you'll go on to check that SpellStar is ready to perform the maintenance operation you want. The next section of this menu lists all the actions to choose from.

```
        DICTIONARY MAINTENANCE OPTIONS
N — Create a new dictionary                    =    NO
A — Add words                                  =    NO
T — Delete words                               =    NO
C — Combine add/delete                         =    YES
S — Use "S" words from ".ADD" file             =    NO
L — List dictionary words                      =    NO

<Return> —    Start dictionary maintenance.
    X —       Exit to Operations Menu

Control or option to change? ■
```

In this run we are going to add words to the main dictionary, so leave the value for "create a new dictionary" as NO, and go on to Option A.

1. Press A for "Add words."
2. Read the prompt at the bottom of the screen.

```
A — Add words NO      Add all words in word file to
                      dictionary. Enter <Y>es or <N>o.
```

3. Press Y for "yes."

Notice on the Options menu that when you do this, the "YES" next to "Combine add/delete" becomes "NO". SpellStar starts out with a default value of "YES" for the "Combine add/delete" operation, but when you choose to do something else it automatically switches to "No."

Bypass T for "Delete words," thus leaving its value as "NO".

And bypass C for "Combine add/delete," leaving its value as "NO."

Lesson 2
Some basics

In this lesson, you will learn how to start and stop your computer, and how to start and stop WordStar. You will also learn how WordStar helps you when you need information.

Starting Your Computer

The following are the approximate steps you must take to start up your computer. The steps are not the same for all machines, so there may be some differences between the steps shown here and the steps required for your computer.

1. Turn on the start switch (or turn the start key).
2. Press the RESET button (not all machines require this step).
3. Press the space bar (not all machines require this step).
4. Insert your diskettes:
   a. Insert the WordStar diskette (a boot diskette containing an installed WordStar) into the first drive (usually called drive a:).
   b. Insert your work diskette into the second drive (usually called drive b:) if required.
5. Type b (for boot) after the question mark (?). (Underlining indicates an entry item in this guide.)

Take a moment right now to ask someone for the exact procedures for your machine, and write them down for reference. Later you will type them using WordStar.

Starting WordStar

Now start WordStar by following these steps:

1. After the screen prompt A>, type ws (for WordStar) and press RETURN. (With some systems, you may type something a little different.)
   a. First you will see the MicroPro copyright message for a few seconds.
   b. Then you will see a list (or menu) of commands entitled "editing no file," with a directory under it. This is about how your screen should look:

```
                    <<<NO-FILE MENU>>>
---Preliminary Commands---    | -File Commands-   | -System Commands-
 L Change logged disk drive   |                   | R Run a program
 F File directory      off (ON)|   P Print a file  | X Exit to system
 H Set help level             |                   |
-  -Commands to Open a File - -|   E Rename a file | -WordStar Options-
    D  Open a document file    |   O Copy a file   | M Run MailMerge
    N  Open a non-document file|   Y Delete a file | S Run SpellStar ■

DIRECTORY of disk A:
 CHAPTR1.DOC     CHAPTR1.BAK     CHAPTR.DOC      CHAPTR.BAK
 CONTENTS        FILE1.DOC       FILE1.BAK       FILE2.DOC
 LETTER.DOC      LETTER.BAK      MAILMRGE.OVR    TEST.DOC
 WS.COM          WSMSGS.OVR      WSOVLY1.OVR
```

Typical "editing no file" Display

Now you'll tell SpellStar to rename the updated dictionary and put it on the B: drive.

1. Press U, for "Change name of new or updated dictionary."
2. Read the prompt at the bottom of the screen.

U — New dict. A:	**This is the new or updated dictionary. Enter the drive, filename, and/or extent of different dictionary.**

3. Type B:SPELSTAR.NEW, and press RETURN. (If you make a mistake here, or in typing any other value, backspace over it with the "backspace" key or CTRL H (^H) and type over it.)

Now for "Change work drive for sort." Just as in the spelling check step, SpellStar uses temporary files to sort the words in your word file. With the "change work drive for sort" control, you can decide where you want those files to go. They will disappear when the maintenance run is over, but you must have space for them while SpellStar is using them. Combined, they are roughly equivalent to the size of your word file.

Note

Once again, in order to know which of your disks has enough space to accept the temporary sorting files, you would have to run STAT from WordStar's "editing no file" menu.

You will not need to check disk space for this practice run, since you will be using the blank disk in B: for a work disk.

For this practice run, the work drive should be B:

1. Press W.
2. Check the prompt at the bottom of the screen.

W — Work drive A:	**This is drive to receive temporary sorting files created by SpellStar. Enter letter of drive to be used.**

2. If required, type L to request to change the logged disk drive. (This will be required if the WordStar programs are on one disk and your document files are on another.)
   a. When the prompt NEW LOGGED DISK DRIVE (letter, colon, RETURN)? appears, type b: and press RETURN. (In some cases, you may type c: or d:.)
   b. The "editing no file" menu will return with the same list of commands (but a different directory).
3. This time press D to "create or edit a Document file" (the explanation is in the upper left-hand corner).
4. When the prompt NAME OF FILE TO EDIT? appears, type the name of your file (say Practice) and press RETURN.

Stopping WordStar

After you have finished typing (for now, a few lines for practice should be enough), you can stop WordStar as follows:

1. While holding down the CTRL key with one finger, type KD with another. This will save your document file and return you to the "editing no file" menu.
2. When the "editing no file" menu appears, press X.

WordStar will stop and you will see B (or something similar) somewhere on the screen. This means that the operating system is now running. Your operating system allows you to copy files, delete files, and check your work space. See the manual on your operating system to learn how to perform these functions.

To return to WordStar from your operating system, see "Starting WordStar" earlier in this lesson.

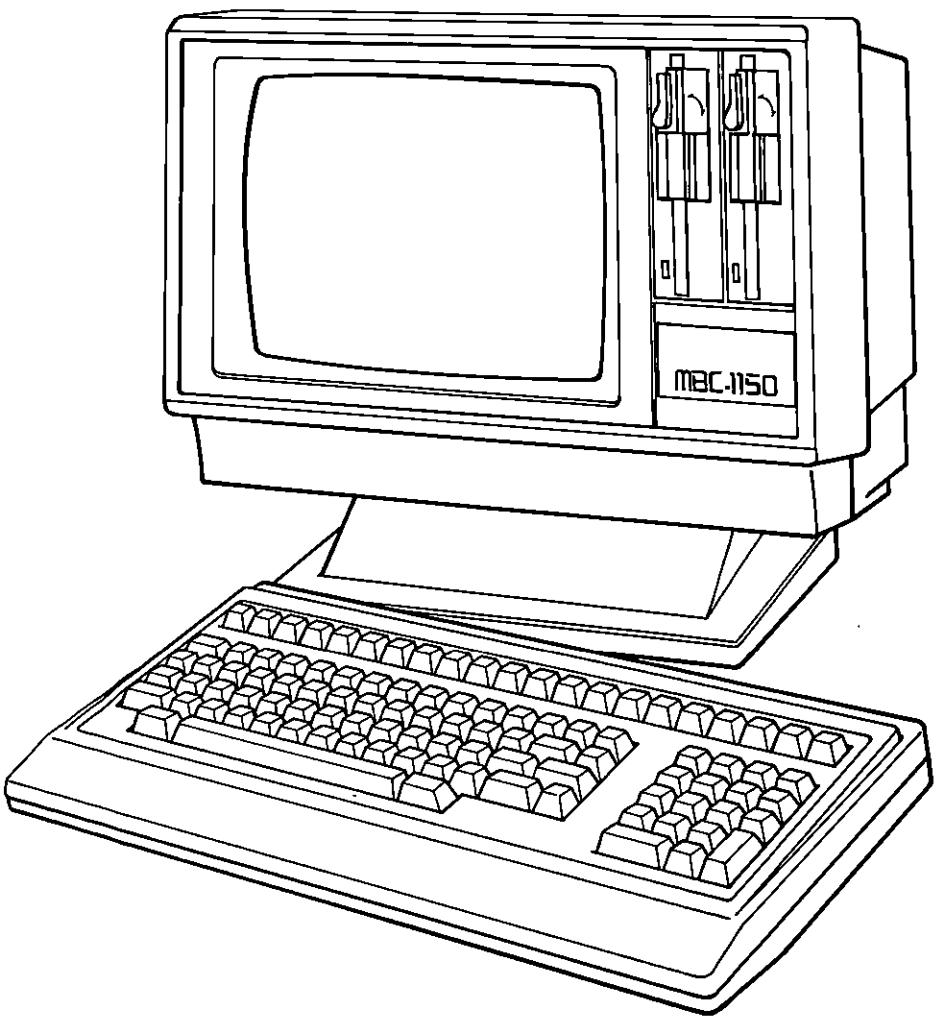
Stopping Your Computer

If you plan to be away from the machine for a while, you may want to turn the computer off completely. Here is how to do this:

1. When the B> prompt appears, release each of the diskettes. (Never leave diskettes running in the machine while you are away.)
2. Store the diskettes in a safe place until you are ready to return to your machine.
3. If appropriate, turn off the switch (or key) on your machine. (This may not be good for some machines, so check with your supervisor before doing this.)

Help from WordStar

Whenever WordStar is running, you will never be lost for long. If you don't remember which key to push, WordStar will remind you. For example, as soon as you enter WordStar, the "editing no file" display is there to tell you which keys you can push. (By the way, if you push the wrong one, the worst thing that can happen is that you will get something different from what you were expecting. The scene depicted below is not likely to take place.)



The Bettmann Archive, Inc.

```
SpellStar — Dictionary Maintenance

     DICTIONARY MAINTENANCE CONTROLS          CURRENT VALUE
F —  Change word file to use                  = A:SAMPLE  .ADD
D —  Change dictionary to update              = A:SPELSTAR.DCT
U —  Change name of new or updated dictionary = A:
W —  Change work drive for sort               =       A:

     DICTIONARY MAINTENANCE OPTIONS
N —  Create a new dictionary                  = NO
A —  Add words                                = NO
T —  Delete words                             = NO
C —  Combine add/delete                       = YES
S —  Use "S" words from .ADD file             = NO
L —  List dictionary words                    = NO

    <Return> — Start dictionary maintenance.
       X     — Exit to Operations menu

Control or option to change? ■
```

As in the spelling check step of SpellStar, if you like the way the current values are set up, you can go right to the Maintenance Options.

In this practice session, however, we'll make some adjustments to the controls. These tell SpellStar exactly which file contains the words to use, which dictionary to apply those words to, whether you want the resulting dictionary to be renamed, and where SpellStar should put its temporary sorting files.

The techniques you'll use to change the dictionary controls are the same ones you used for the spelling check controls.

You can change the drive, filename, or extension separately or in combination just by typing in new information over what's already there. Use the '#' key to blank out any portion of the control. Use the space bar to cancel the entire control; and press RETURN alone to leave the control unchanged.

First, take a look at "word file to use."

1. Press F.
2. Read the prompt at the bottom of the screen.

```
F — File:A:SAMPLE.ADD        This is the current file. Enter the
                             drive, filename, and/or extent of the
                             file to use.
```

Since the current value is already SAMPLE.ADD, press RETURN to leave it unchanged. Go on to the next control.

The "dictionary to update" can be either a main or supplemental dictionary that you want to add words to or delete words from. (If you were creating an entirely new dictionary, you'd leave this value blank.)

1. Press D.
2. Read the prompt at the bottom of the screen.

```
D — Dictionary A:SPELSTAR.DCT    Dictionary to update (add/delete
                                 words). Enter the drive, filename
                                 and/or extent of different
                                 dictionary.
```

When SpellStar first shows you the controls, it will show SPELSTAR.DCT on the logged disk drive as the default value for this control. It happens to be the dictionary we want with the correct drive location, so we'll leave it alone. Press RETURN to leave the value unchanged.

The "new or updated dictionary" is the one SpellStar creates during this maintenance run. It will be either a completely new dictionary or an old one with words added or deleted. If you wanted to update an existing dictionary, without changing its name or location, then you'd leave this control blank. (If you were sure that the disk with the "dictionary to update" had enough extra space to accept the temporary dictionary file that SpellStar creates during updating. More about this in the next page's Note.) The result would be one updated dictionary on the logged disk drive.

If you wanted to update a dictionary and put its updated version on a different drive, then you'd enter the new drive letter, including the colon following. SpellStar would save the old dictionary where it was and put the updated one where you told it to. The result would be two dictionaries on different drives, each with the same name.

You could also give an updated dictionary a new name, with SpellStar, saving the old one, simply by entering the new name with the "new or updated dictionary" control.

Note

Whenever you do an updating maintenance run, make sure you have extra disk space equivalent to the size of your original dictionary. SpellStar needs this space for either a temporary dictionary file or for the dictionary you've specified with U, for "new or updated dictionary". You can find out how much space you have by running the STAT program from WordStar's "editing no file" menu. If you'd reached this point in dictionary maintenance without checking your disk space with STAT, you could hit "X" to go to SpellStar's Operations Menu, then hit a second "X" there to go to the "editing no file" menu. As usual, you wouldn't hurt your file or your dictionaries if you chose to exit at this point.

For this practice run, you do not need to check disk space, since you will be putting your updated dictionary on the blank disk in your B: drive, as a guarantee you'll have enough disk space.

Right now let's take a quick look at the other menus that WordStar displays for you. To see these menus, you will have to start WordStar and create a document file:

1. With the "editing no file" menu on the screen, press D to create a document file.
2. When the prompt NAME OF FILE TO EDIT? appears, type Practice and press RETURN.
3. After several messages come and go on the screen (WAIT, NEW FILE), the lower half of the screen will be cleared and the new file will be ready. This is how the screen should look:

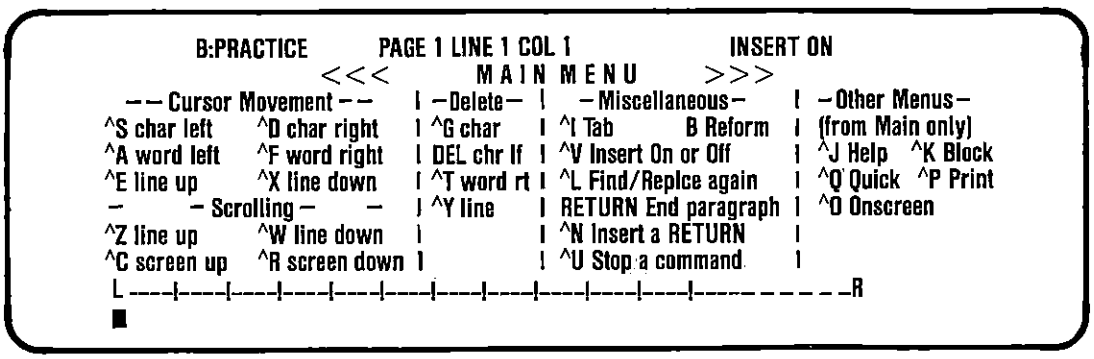
4. While holding down the CTRL key with one finger, type J to see the Help Menu. (Just remember, J stands for help. Note: This is a joke; there is no J in "help.")
   a. When the Help Menu appears, look it over, then press R to read about the ruler line.
   b. After taking a look, press the space bar to return to the Main Menu.

Help Levels

You also have a choice in how much help you want WordStar to give you:

- All the help I can get (level 3).
- A lot of help (level 2).
- A little help (level 1).
- No help (level 0).

When you first start WordStar, you get help level 3 automatically. You will probably want to stay with level 3 through this entire course. However, at the end of the booklet, we'll talk about how you can switch to a lower help level when you're ready. Less help usually means more screen area to work with.


B:PRACTICE PAGE 1 LINE 1 COL 1 INSERT ON
<<< MAIN MENU >>>
--Cursor Movement-- | -Delete- | -Miscellaneous- | -Other Menus-
^S char left ^D char right | ^G char | ^I Tab B Reform | (from Main only)
^A word left ^F word right | DEL chr lf | ^V Insert On or Off | ^J Help ^K Block
^E line up ^X line down | ^T word rt | ^L Find/Replce again | ^Q Quick ^P Print
- - Scrolling - - | ^Y line | RETURN End paragraph | ^O Onscreen
^Z line up ^W line down | | ^N Insert a RETURN
^C screen up ^R screen down | | ^U Stop a command
L----|----|----|----|----|----|----|----|----|----|----|----R

The Main Menu

a. The very top line is called the **status line** and tells you the name of your document (B:PRACTICE, file "Practice" on disk drive B:), your current page, line, and column number, and other information (INSERT ON is one example).
b. The next eight lines give the Main Menu itself. (All you need to do now is just glance over it.)
c. The tenth line of the display, with L on the left and R on the right, is called the **ruler line.** This tells you where your margins and tabs are currently set:
   (1) L marks the left margin.
   (2) R marks the right margin.
   (3) Each ! marks a regular tab setting.
   (4) Each # marks a decimal tab setting.

5. While holding down the CTRL key with one finger, type Q to see the Quick Menu. (Press the space bar when you are ready to return to the Main Menu.)
6. Repeat Step 5 with the other letters to see the rest of the menus:
   a. K — Block Menu
   b. O — Onscreen Formatting Menu
   c. P — Print Menu
7. While holding the CTRL key with one finger, type KQ with another to release and discard the file.

Any time you push one of these keys to begin a WordStar function, if you wait a few moments, the menu will appear to help you.

Selecting a WordStar Function

If you want to select a function on a typewriter (set a margin, clear a tab, and so on), there is usually one key designated for the function. With WordStar, you select some functions with a single keystroke, just the way you would select a typewriter function. (With WordStar, it will be a letter key like D, rather than a special function key like TAB.) Other functions you select by pressing a combination of keys.

There are also a number of functions related to printing that you select by a third method. This method will be described in the Extended Course (Lessons 13-18).

Lesson 20
Dictionary maintenance
(SpellStar option only)

Now you will learn to update dictionaries and to create new dictionaries with SpellStar. You will use a file that SpellStar created containing the words from SAMPLE.TXT that you decided to add to the dictionary, during Lesson 19.

What Is Dictionary Maintenance?

In Lesson 19, when you made corrections to SAMPLE.TXT, you asked SpellStar to add several words to the main dictionary or to a supplemental dictionary. SpellStar put all those words into a file it made up and called SAMPLE.ADD. (After your spelling check on SAMPLE.TXT, you probably saw SAMPLE.ADD on your file directory.)

Dictionary maintenance in SpellStar is actually a two-step process. First a word file is created, by you or SpellStar.

The word file may contain words for updating, adding to, or deleting from) a dictionary; or it may contain words to create an entirely new dictionary. Most of the time the word file will be the ".ADD" file that SpellStar creates during a spelling check.

You can also create a brand new word file in the edit mode of WordStar, simply by making a list of words. Or, you could decide you want all the words in a certain document to be in the dictionary, and make that document the word file.

You can also buy a disk containing a main dictionary or a specialized dictionary and use that as your word file.

However the word file is created, it must go through the second step of the dictionary maintenance process to actually be integrated with existing dictionaries or to be organized in the proper format for SpellStar to use.

Now you'll practice several kinds of dictionary maintenance. We'll start with adding words to the main dictionary.

Dictionary Maintenance Controls

1. Put a blank disk in drive B:.
2. Go to WordStar's "editing no file" menu and press S to get SpellStar.
3. When the prompt NAME OF FILE TO CHECK / ADD TO DICTIONARY? appears, type A:SAMPLE.ADD.
4. When the SpellStar Operations Menu appears, press M for "Maintain dictionary."
5. Take a look at the Dictionary Maintenance Controls Menu.

Recovering from Errors

Suppose you select a WordStar function and then find that you actually wanted another function. WordStar allows you to interrupt the undesired function in the following way:

1. While holding down the CTRL key with one finger, press U with another.
2. When you see the screen prompt "*** INTERRUPTED *** Press ESC Key," press the ESCAPE key (often labeled ESC).
3. Now you are free to select another function.

Suppose you open a file and discover that it isn't the file you wanted. Or suppose you open the right file, but make some mistakes that are so hard to correct that it would be easier to start from the beginning. In either case, WordStar allows you to abandon the file and make another selection:

1. While holding down the CTRL key with one finger, type KQ with your other fingers.
2. If you have done any typing or made any changes in the file, the following message will appear on the screen: ABANDON EDITED VERSION OF FILE [name of file]? (Y/N) :
   a. Type Y if you are sure you want to abandon the file and there is no reason to save it.
   b. Type N if you change your mind and decide to save the file after all.
3. The file you had open will be abandoned and you are now free to open another file (or the same one again).

Notice that the next word the cursor jumps to is "disco." Look at the paragraph above. The word "survay" in the last line is flagged, but SpellStar skipped it, because reformatting the paragraph took the cursor past this word. CTRL L always takes you to the next flagged word forward from the cursor.

Don't worry about correcting "survay." We'll get back to it later. Let's go on.

1. "Disco": Press D for "Add to dictionary." Press Y when Y/N prompt appears.
2. Press D at the next two words, "jumpsuit" and "discos." Press Y when Y/N prompt appears.
3. Press I at the next two words, "Maureen" and "Whiskey's," and watch the screen carefully as you do.

Observe that the cursor stops briefly at the word "Disco" in "Whiskey's Disco City," removes the flag, then moves on to the next flagged word. That's because you already told SpellStar to add "disco" to the dictionary the first time it appeared. SpellStar can remember "ignore" or "add" instructions for approximately 20 words at a time.

SpellStar did, however, stop at "discos," even though you'd already told it to add "disco" to the main dictionary. It treats plurals and other variations of words as separate words.

The cursor should now be at the word "typos." Let's add this word to our main dictionary.

1. Press D. Press Y in response to the prompt.
2. The next word, "corespondence," is hyphenated with a WordStar soft hyphen. SpellStar ignores soft hyphens, joining the two parts of the word into one. Press F for "Fix word" and correct the spelling to "correspondence." Press CTRL B (^B) to reformat the paragraph. Press CTRL B (^B) two more times in response to the hyphenation prompt. Press CTRL L (^L).
3. Press I for "Ignore word" at the next six flagged words: "keytops," "hiccuping," "Tom's," "wit's," "WordStar's," and "onscreen." Two of these words ("wit's," "WordStar's") are possessive forms of words already in the dictionary. SpellStar treats them as different words.
4. "Insubodrination": Press F for "Fix word" and correct spelling to "insubordination." You don't need to reformat, since you haven't changed the number of characters in the line. Press CTRL L (^L).
5. Press I for "Ignore word" until you are at the end of the letter.
6. When the message "Spelling Check Completed *** Press ESCAPE key" appears, press ESCAPE.

You see on the screen the end of SAMPLE.TXT. SpellStar is waiting for you to "save" the edited file with CTRL KD (^KD).

But first—remember the word you bypassed and the word SpellStar skipped over when you reformatted a paragraph? You'll go back and take care of them now. It's always a good idea to go back over your document a second time to make sure you've caught everything, so

1. Press CTRL QL (^Q^L).
2. When the prompt RETURN=search forward, B=search backward, G=from start of file: appears, press G and RETURN.
3. The cursor will land at "ATTN", the word we told SpellStar to bypass. Press D to add it to your dictionary, and press Y when the Y/N prompt appears.
4. The cursor now goes to "survay." Press F for "Fix word" and correct the spelling to "survey." Press CTRL L (^L) to find any other flagged words. (You may know there aren't any more, but always do CTRL L anyway, to make sure.)
5. When the prompt "Spelling Check Completed *** Press ESCAPE key" appears, press ESCAPE.
6. Now press CTRL KD (^K^D) to save the file SAMPLE.TXT.

You are now back at WordStar's no-file menu.

SAMPLE.TXT now contains the corrected version of Calvin Hotstuff's letter. The back-up file, SAMPLE.BAK, contains the letter as it was before you corrected it.

Print a copy of SAMPLE.TXT, so you can see for yourself that all the errors have been fixed.

1. Check to see that your printer is on, and ready to begin printing.
2. Press P, to print a file.
3. In response to the prompt NAME OF FILE TO PRINT? type SAMPLE.TXT.
4. Press ESCAPE to begin printing.

If you want to use the SAMPLE.TXT letter to practice this lesson again, do the following:

1. Press Y, to delete a file.
2. Respond to the prompt NAME OF FILE TO DELETE? by typing SAMPLE.TXT. Press RETURN.
3. Press E, to rename a file.
4. Respond to the prompt NAME OF FILE TO RENAME? by typing SAMPLE.BAK, and press RETURN.
5. Respond to the prompt NEW NAME? by typing SAMPLE.TXT.
6. Press Y, to delete a file.
7. Respond to the prompt NAME OF FILE TO DELETE? by typing SAMPLE.ADD, and press RETURN.

SAMPLE.ADD is the file created by SpellStar for the words you decided to add to a dictionary or ignore. If you didn't delete it, you would have trouble practicing this lesson again.

Lesson 3
Typing a letter

In this lesson you are going to type a business letter using WordStar and then print the letter on the printer that is connected to your computer. Assuming your computer is running, you have inserted the diskettes, and WordStar is running, you are ready to create a document file for the letter:

1. Open a new file named "Letter":
   a. When the "editing no file" menu appears, press D to create a document file.
   b. In response to the prompt NAME OF FILE TO EDIT?, type Letter and press RETURN.
   c. There will be a pause while the messages WAIT and NEW FILE appear on the screen.
2. When the status line, main menu, and ruler line appear, you are ready to begin.

Preliminary Adjustments

Ordinarily, you do not have to make any adjustments — you just start typing in the blank space below the ruler line. But this time, to get some practice in using WordStar, you will make three minor adjustments:

1. Change the left margin to column 21:
   a. While holding down the CRTL key with one finger, type OL with another.
   b. When the question LEFT MARGIN COLUMN NUMBER? appears, type 21 and press RETURN.
2. Change the right margin to column 56:
   a. While holding down the CTRL key with one finger, type the letters OR.
   b. When the question RIGHT MARGIN COLUMN NUMBER? appears, type 56 and press RETURN.
3. Turn off justification (alignment of the right margin):
   a. While holding down the CTRL key with one finger, type O to look at the Onscreen Formatting Menu.
   b. You should see "J=Justification off (ON)" in the middle column. If so, hold down CTRL and type J; if not, press the space bar and continue.
   c. Now you should see "J=Justification on (OFF)."

Now the status line, main menu, and ruler line should be back on the screen. This is how the ruler line should look:

```
L----!----!----!----!----!----!----R
```

If it looks like this, go on to the next section; if it doesn't, repeat steps 1 and 2 very carefully until it does look like this.

A Letter with Mistakes

Here is the letter. Type this letter exactly as it appears, including mistakes. (In a moment, you will get a chance to correct them, and thereby learn more about WordStar.) Press the RETURN key at the places shown, but nowhere else. Within a paragraph, WordStar will return automatically from one line to another. So you never have to think about where you are on the line or how long the last word is going to be. (When you start, the cursor will be resting in column 1, not in column 21, where you just set the left margin. But as soon as you type the first letter, the cursor will jump over to column 21. Then it will move across the screen as you type.)

```
SpellStar has flagged the misspellings in the text.

Enter < Return > to correct errors in text, "R" to restart.
```

In SAMPLE.TXT 28 different words are misspelled, and when SpellStar adds up all the occurrences of these words, it finds 35 total misspellings.

You have two choices now: to proceed with correcting the errors in SAMPLE.TXT, or to exit with "R" from the spelling check and go back to SpellStar's Operations Menu.

Correcting Errors in the Text File

You want to go ahead with correcting errors in SAMPLE.TXT, so

1. Press RETURN.
2. Watch SAMPLE.TXT appear on the screen, with SpellStar's menu of correction commands above it.

If you worked for Freewheeling Enterprises, you might have a supplementary dictionary with the names and addresses of company employees. If you used that dictionary to check the letter, then SpellStar wouldn't flag Calvin P. Hotstuff and his address. Let's create such a supplemental dictionary, and add Calvin's name and address to it.

Setting Aside Words to Add to a Dictionary

1. Press S for "Add to supplemental dictionary." When the prompt Add to Supplement: CALVIN (Y/N)? appears, press Y.
2. Now the cursor moves onto the next "misspelled" word— "Hotstuff." Press S to add it to the supplement. Press Y in response to the prompt.
3. Press S at the next two words "Freewheeling" and "Biloxi," also. Press Y in response to the prompts.

```
A:SAMPLE.@@@ PAGE 1 LINE 3 COL 42 ACTION [F/B/I/D/S]?

F - Fix word                D - Add to dictionary
B - Bypass word             S - Add to supplemental dictionary
I - Ignore word

L----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----R
                        April 1, 1981

                                    Calvin P. ^@Hotstuff
                                    ^@Freewheeling Enterprises
                                    ^@Biloxi, Mississippi
MicroPro ^@Internatoinal
1299 Fourth Street
^@San ^@Rafael, California 94901
     ^@Attn: Customer Service

Dear Sirs:
     I want to start by telling you that I think WordStar is a
```

The cursor is flashing at the first flagged error, the name "Calvin" in the return address, indicating that it's either misspelled or not in SpellStar's dictionary.

Notice that other words in the text are flagged with "@." When the cursor lands on a flagged word, the flag disappears and the word may be either highlighted or dimmed, depending on the kind of terminal you have.

Now you come to the first truly misspelled word, "Internatoinal". To correct the spelling . . .

1. Press F for "Fix word."
2. Now you are in WordStar's edit mode. All the WordStar commands are available to you to correct the misspelled word and to change anything else in the document you want. WordStar's main help menu appears at the top of the screen.

   Change "Internatoinal" to "International."

Now, if you didn't know the correct spelling of "International", you would have to look it up in your dictionary. SpellStar can't tell you the correct spelling of a word.

Let's continue:

1. In order to get out of WordStar's edit mode and move the cursor to the next flagged word, "San", press CTRL L (^L).

   Whenever you do a "Fix word", follow it with CTRL L (^L).
2. "San" is next. We don't want to put this word in our main dictionary or our supplement, so we'll tell SpellStar just to ignore this word and go on to the next one. Press I for "Ignore word."
3. The cursor goes to "Rafael." Press I, for "Ignore word."
4. "Attn" is next. This may be a word you want to put in the dictionary, if you use it a lot. Right now, let's tell SpellStar to bypass this word, and we can come back to it later to make a decision. Press B for "Bypass word."
5. "Programm": Press F for "Fix word" and correct spelling to "program." Press CTRL B (^B) to rejustify the paragraph. Then press CTRL L (^L) to go on to the next flagged word.
6. Notice that SpellStar stops in the middle of the word "hard-wrkng." SpellStar takes compound words like this and treats them like two separate words. Press F for "Fix Word" and change "wrkng" to "working." Press CTRL L (^L).
7. "Programm": Press F for "Fix Word" and correct. You corrected this word when it appeared in the letter the first time, but SpellStar doesn't remember the correct spelling for you, so you must do it again. Press CTRL B (^B) to reformat the paragraph. Press CTRL L (^L).

july 22, 1981 **RETURN**
RETURN
Bill somers,President **RETURN**
Beauty, Inc. **RETURN**
485 Avenida de las Guapas **RETURN**
Los Angeles, California 90036 **RETURN**
RETURN
Dear mr. Somers: **RETURN**
RETURN
In reference to our conversation earlier today, I would like to meet with you as soon as possible. We should discuss all possibilities of merging Beauty, Inc. and Heavy Dealing. **RETURN**
RETURN
Please call to set an appointment with me secretary at your earliest convenience. **RETURN**
RETURN
Sincerely, **RETURN**
RETURN
Jim Winters, President **RETURN**
Heavy Dealing, Inc. **RETURN**
RETURN
JW/sl **RETURN**
■

Correcting "july"

Now you can go back and correct the mistakes in the letter. To make these corrections, you will first have to move the cursor to the screen location of each mistake. (On your particular screen, the cursor may be in the form of a rectangle, a triangle, a hyphen, or an underline, and it may or may not be flashing.) For example, after you have completed the letter, the cursor will be on the line below JW/sl in column 1. The first thing you need to do is to move the cursor in the j in "july" in the first line of the letter:

1. While holding the CTRL key down with one finger, press QR. This will take the cursor straight to the beginning of the file (to the left of "july").
2. While holding the CTRL key down, press F. This will move the cursor across the screen to the j in "july."

Now you can change the lowercase j to an uppercase J. First look at the upper right-hand corner of the screen, on the status line. If you see the words INSERT ON, this means that anything you type will be inserted in front of july. If you type a J now, you will change "july" to "Jjuly," which isn't what you want. So to make the change correctly, you first have to shut off automatic insertion.

1. While holding down the CTRL key with one finger, press V with another.
   a. Look at the upper right-hand corner of the screen and note that the words INSERT ON have disappeared.
   b. Just to see how this works, keep the CTRL key down and press V two more times while watching the upper right-hand corner. You will see INSERT ON appear and then vanish again.
2. With the cursor resting on the incorrect j and INSERT ON gone from the upper right-hand corner of the screen, hold down the SHIFT key with one finger and press J with another. The uppercase J will now replace the lowercase j (and change "july" to "July").

Correcting "somers"

Next, to change "somers" to "Somers" on the third line, proceed as follows:

1. While holding down the CTRL key, press X twice. This will move the cursor down two lines, but in column 1.
2. While holding down the CTRL key, press F twice. This will move the cursor across to the first s in "somers."
3. Since automatic insertion is still off, you can just type an uppercase S (or SHIFT S) over the lowercase s. Now you have changed "somers" to "Somers."

Inserting a Space before "President"

Next, you want to insert a space between the comma and "President" on the same line:

1. While holding down the CTRL key with one finger, press D six times with another. This moves the cursor across the line six characters to the P in "President."
2. Now turn automatic insertion back on by holding down CTRL and pressing V. (You should see INSERT ON reappear in the upper right-hand corner.)
3. Press the space bar. You will see the word "President" move to the right one space. Now you have inserted a space after the comma.

Correcting "mr."

Now you want to correct "mr." in the eighth line. Once again you start by positioning the cursor:

SAMPLE.TXT or any other file, you won't hurt anything. When you return to this point, it will look just as you left it, as long as you haven't exited to WordStar before returning.

We do want to perform a spelling check, though, so let's go.

1. Press RETURN.
2. Watch the screen display change to reflect what SpellStar's finding in SAMPLE.TXT.

```
SpellStar is now checking your document for misspelled words.
Number of words in document ..... :422
Number of different words ..... :261
Number of words in main dictionary .... :21182
Number of words in supplement ..... :
Number of dictionary words checked .... :21128
Number of misspelled words ..... :28
Total number of misspellings ..... :
```

The first thing SpellStar does is count the total number of words in your document; the total appears on the first line of the screen display.

Then it tells you how many of those words are "different"; after you throw out the duplicates, how many unique words are left? That total appears on the second line.

This calculation is useful if, for instance, you are writing something technical for non-technical people. A proportionately high number of different words indicates too much jargon.

In the third and fourth lines of the on-screen summary, SpellStar tells you how many words are in the main and supplemental dictionaries you specified for this check.

The changing number on the fifth line, "Number of dictionary words checked," lets you know how far SpellStar has gotten with your spelling check.

After SpellStar counts the words in your document, it sorts them by length and alphabetically and compares them to the words in the dictionary, which is organized the same way. As it compares, it tells you how many dictionary words it has gone through, by thousands.

By seeing how long SpellStar takes to get through a thousand words, you'll know approximately how long it will take to check your entire document. The more words in your document, the longer it takes to check. You can go do something else while the machine checks a long document, and come back when it's finished.

Next, SpellStar tells you how many different words are misspelled. A "misspelled" word is any word that doesn't match up with a word in the dictionary or dictionaries you've specified. So SpellStar flags misspellings, typos, and all other words not in the dictionary or dictionaries.

SpellStar won't fill in the last line, "Total number of misspellings," until later.

When SpellStar has finished its check of SAMPLE.TXT, it pauses to let you decide what to do next.

At this point, SpellStar has not yet actually flagged the errors within the text of SAMPLE.TXT. Before you tell SpellStar to do that, you can elect to see listed on the screen all the misspellings, typos, and words unmatched in the dictionary; or you can leave the spelling check at this point without affecting your file.

SpellStar shows you the choices below the on-screen summary:

```
SpellStar has completed proofreading your document.
    Enter "L" to list the misspelled words.
    Enter <Return> to flag errors in your text.
    Enter "R" to abandon the check and restart.
```

Let's list the misspelled words.

1. Press L.
2. Your screen should look like this:

```
AA CH WS SAN ATTN DISCO TOM'S TYPOS WIT'S WRKNG BILOXI CALVIN DISCOS
RAFAEL SURVAY KEYTOPS MAUREEN HOTSTUFF JUMPSUIT ONSCREEN PROGRAMM
HICCUPING WHISKEY'S WORDSTAR'S FREEWHEELING CORESPONDENCE INTERNATOINAL
INSUBODRINATION


Enter <Return> to flag errors, "R" to restart.
```

You can see the kinds of words that aren't in SpellStar's dictionary: abbreviations (AA, ATTN); slang (DISCO); proper names (RAFAEL, MAUREEN); variations on root words ("hiccup" is in the dictionary, but HICCUPING isn't). And, most important — misspelled and mistyped words (WRKNG, INTERNATOINAL).

You don't see state names or most plurals from SAMPLE.TXT on the list because SpellStar's dictionary includes names of all the states in the U.S. and the plurals of most common nouns.

(Remember that at this point SpellStar has not yet flagged these words in your document; once you're using SpellStar in your day-to-day work, if you saw words on this list you thought were in your dictionary [either main or supplemental], you could go back and check whether you'd used the right dictionary. To do this, you'd press "R" to go back to the Operations Menu, then "C" to look at your controls. You could change the dictionary or dictionaries in use, if necessary, and re-do the spelling check. As usual, you wouldn't hurt your document file if you left it now.)

Now that you've seen the errors listed, tell SpellStar to go ahead and flag those errors in the text of SAMPLE.TXT.

1. Press RETURN.
2. Now see that SpellStar removes the word list, fills in a number on the last line in the checking summary, "Total number of misspellings," and shows you a new prompt at the bottom of the screen.

1. While holding down CTRL, press X five times. This will move the cursor down five lines (to the left of "Dear"). (We could also say, "Press CTRL X five times." This is a shorter way of saying it.)
2. Press CTRL F twice to move the cursor across one word to the m in "mr."
3. Press CTRL V to turn off automatic insertion. (Make sure INSERT ON disappears from the upper right-hand corner.)
4. Type an uppercase M (or SHIFT M) over the lowercase m to change "mr." to "Mr."

Let's take a moment now to see how you've done so far. The first eight lines of the letter should look like this:

July 22, 1981

Bill Somers, President
Beauty, Inc.
485 Avenida de las Guapas
Los Angeles, California 90036

Dear Mr. Somers:

If your letter looks just like this, wonderful! Go on to the next section ("Correcting 'should'"). If it doesn't, you have nothing to be ashamed of. Just give it another try. Here's how:

1. If you were fairly close, try turning back to the section called "Correcting 'july'" and going back over the steps very carefully.
2. If you are not very close and would like to start all over again, hold down the CTRL key and type KQ. Now you can turn back to the beginning of this lesson and forget about your mistakes.

Correcting "should"

Your next task is to replace "should" in line 13 with "must":

1. Press CTRL X five times to move the cursor from "Mr. Somers" five lines down (to the left of "should").
2. Press CTRL F to move the cursor across to the s in "should."
3. Type must over the word "should". Now you have must ▯d", with the cursor over the l.
4. Press CTRL T to delete "ld." Notice how the rest of the line moves left two spaces when you press CTRL T.

Emphasizing "all"

Now you are going to do something that will place more emphasis on the word "all" in the same line:

1. Press CTRL F twice to move the cursor across one word to the a in "all."
2. Press CTRL V to turn automatic insertion back on. (Make sure you see INSERT ON in the upper right-hand corner of the screen.)
3. Press CTRL PB (that is, hold down the CTRL key with one finger, then type PB with another, without a pause between the P and the B).
   a. You will see the characters ^B inserted in front of the word all. (The characters ^B represent an even shorter way of saying CTRL B.)
   b. Note that in some instances, control characters (like CTRL B) are actually displayed on the screen along with the characters of the text.
4. Press CTRL F (also written ^F) to move the cursor across to the p in "possibilities."
5. Now press CTRL S (or ^S) to move the cursor back to the space between "all" and "possibilities."
6. Press CTRL PB (^P^B) again, but this time with a pause between ^P and ^B.
   a. If you wait long enough (about three seconds), you will see the menu at the top of the screen change.
   b. Then if you look at this menu, you will see B in the middle column, followed by the explanation "Boldface begin/end."
   c. This tells you that by placing a ^B on each side of the word "all," you want WordStar to print "**all**" in boldface type, as you see here.
   d. Note that "**all**" will not appear in boldface on the video screen —only on paper after you have printed this letter.

Correcting a Sentence

Your next task is to change the wording of the sentence in the second paragraph to, "Please call my secretary to set an appointment at your earliest convenience." This involves three changes: deleting the word "with," changing "me" to "my," and moving "my secretary" from the second line to the first. Here are the steps to follow:

1. Delete "with:"
   a. Press CTRL X (^X) five times to move the cursor five lines down (to the left of "with").
   b. Press CTRL F (^F) to move the cursor across the screen to the w in "with."
   c. Press CTRL T (^T) to delete "with." Now the cursor is on the m in "me."
2. Change "me" to "my":
   a. Press CTRL D (^D) to move the cursor over one space to the e in "me."
   b. Press CTRL G (^G) to delete the e.
   c. Type y to insert the corrected letter.

Note

This is a second way of replacing one letter with another: deleting the old, then inserting the new. (If you recall, the first way was to shut off automatic insertion and type the new letter over the old letter.)

3. Move "my secretary" from line 18 to line 17:
   a. Set a beginning marker:
      (1) Press CTRL A (^A) to move the cursor back to the m in "my."
      (2) Press CTRL KB (^K^B) to mark the beginning of the text you are about to move. (You will see <B> appear in front of "my.")
   b. Set an ending marker:
      (1) Press CTRL F (^F) twice to move the cursor two words across to the a in "at."

Even though we won't use a supplemental dictionary to check spelling in SAMPLE.TXT, let's look at the control to "add supplemental dictionary."

1. Press S.
2. Read the prompt, then press RETURN.

Notice that pressing RETURN left the value unchanged. In this case, the value was blank, but in this and other SpellStar controls, RETURN will always leave the value unchanged, whether that value is a blank or a name you entered earlier.

Changing the File to be Checked

On the Controls menu, you see that the current value of the file to be checked is SAMPLE.TXT. This is the name you entered at the "editing no file" menu, when SpellStar asked you NAME OF FILE TO CHECK / ADD TO DICTIONARY?

If you wanted to change the file value, you'd press "F" and enter the new filename just as you entered new information for the value of the main dictionary.

You'll find this control especially handy in cases where you run spelling checks on several files at once before correcting the errors SpellStar has flagged in any of them.

This time, you'll leave SAMPLE.TXT as the file to be checked, so you needn't do anything.

Changing the Work Drive

In WordStar, we use the term "work drive" generally to mean the drive to which your work is directed for storage.

But in SpellStar, "work drive" has a different meaning. During spelling checks, SpellStar creates its own temporary sorting files containing words from your document.

The "change work drive" control lets you tell SpellStar where to put its temporary files. The critical factor in your decision is the space available on either disk.

The sorting files take up about the same amount of space as your document file. You should always find out how large your document is and check to see if the sorting files will fit on the same disk. This is especially important when you're checking a large file.

Unless you have a lot of files on your boot disk, you should have enough space to put the sorting files there. (SAMPLE.TXT's size is only 4K.) However, you have a blank disk in the B: drive, so to play it safe, use B: for the work drive.

Note

To see your document's size - and how much space is left on your disk, you run the STAT program from the "editing no file" menu. If you needed to do it now, you would have to enter "X" to go back to the SpellStar Operations Menu, and exit using "X" from there to WordStar. (This won't hurt anything, but you'll lose a little time.)

To get back to this point in your check, you would press S at the "editing no-file" menu, and enter the name of the file you're checking and press RETURN. Then press C at the Operations Menu.

Changing the work drive is very simple.

1. Press W.
2. Type B. (This time you don't have to press RETURN.)

Now the controls for your sample spelling check should look like this:

```
        SPELLING CHECK CONTROLS                CURRENT VALUE

    D   - Use another main dictionary =        A:SPELSTAR.DCT
    S   - Add supplemental dictionary =
    F   - Change file to be checked =          A:SAMPLE .TXT
    W   - Change work drive =                        B:

  <Return>  — Start spelling check
     X      — Exit to Operations Menu
```

If your screen looks different, use what you've learned to change the controls so that they match these.

Running a Sample Spelling Check

Now, if you want, you're ready to run the spelling check on SAMPLE.TXT.

On the other hand, you could change your mind. If you decided you would rather do dictionary maintenance or go back to WordStar, you'd simply press "X" and find yourself back at SpellStar's Operations Menu. If you decide to abandon the spelling check here, on

(2) Press CTRL KK (^K^K) to mark the end of the text you are about to move. (If your screen is so designed, you will see "my secretary" become highlighted on the screen.)

c. Move the text:

(1) Press CTRL E (^E) to move the cursor up one line.

(2) Press CTRL A (^A) to move the cursor back to the t in "to."

(3) Press CTRL KV (^K^V) to move "my secretary" to the space between "call" and "to." Now you have re-worded the sentence.

4. Reform the paragraph:

a. Press CTRL B (^B) to reform the paragraph.

b. When the cursor stops on the n in "convenience," press CTRL S (^S) twice to back up two spaces to the v and press the hyphen key (-) to hyphenate the word after "con."

Checking the Results

Now your letter should look like this:

If this is your first time on a computer and your letter looks just like this, you've done a very good job. You're on your way to becoming a WordStar superstar! Go on to the next section ("Printing the Letter").

If your letter needs a little more work, try pressing CTRL R (^R) followed by CTRL E (^E) to return to the salutation line and turning back to "Correcting 'should'" in this lesson. Go through the steps again very carefully. Or if your letter needs a lot more work, you may want to start all over by pressing CTRL KQ (^K^Q) and going back to the beginning of the lesson.

By the way, if you're curious about those "chicken scratches" along the right-hand side of the screen, the < symbols tell you where you pressed RETURN, while the blanks tell you where WordStar began a new line for you.

```
July 22, 1981                                          <
                                                       <
Bill Somers, President                                 <
Beauty, Inc.                                           <
485 Avenida de las Guapas                              <
Los Angeles, California 90036                          <
                                                       <
Dear Mr. Somers:                                       <
                                                       <
In reference to our conversation
earlier today, I would like to meet
with you as soon as possible. We
must discuss ^Ball^B possibilities of
merging Beauty, Inc. and Heavy
Dealing.                                               <
                                                       <
Please call my secretary to set an
appointment at your earliest con-
venience.                                              <
                                                       <
Sincerely,                                             <
                                                       <
Jim Winters, President                                 <
Heavy Dealing, Inc.                                    <
                                                       <
JW/sl                                                  <
```

Printing the Letter

Now you are ready to print this letter on your printer. To make it look more attractive, you can have WordStar justify the right margin for you:

1. Press CTRL OJ (^O^J) to turn on justification. After Steps 2 and 3, this will cause the text in the two main paragraphs to be lined up with even margins.
2. Reform the first paragraph:
   a. Press CTRL E (^E) ten times to move the cursor to the first line of the first paragraph ("In reference to . . .").
   b. Press CTRL B (^B) to reform the first paragraph.

Note

You don't have to worry about the "of" that appears to be past the right-hand margin. It will be lined up with the rest of the paragraph when the page is printed.

   c. When you see the cursor stop over the l in "Dealing," press CTRL B (^B) again to tell WordStar not to bother hyphenating this word.
3. Reform the second paragraph:
   a. Press CTRL X (^X) once to move the cursor down to the first line of the second paragraph ("Please call . . .").
   b. Press CTRL B (^B) to reform the second paragraph.
4. Press CTRL KD (^KD) to save a copy of your file. You will see two messages appear on the screen:
   a. WAIT (telling you not to press any keys)
   b. SAVING FILE B:LETTER — assuming "LETTER" is on drive B (telling you what WordStar is doing now).

Note

This is when your file gets transferred to your diskette for storage. Now your file will be much safer in the event that something goes wrong (the power fails, the plug comes loose, etc.).

When the Spelling Check Controls menu first appears, it tells you the names ("current values") of the dictionaries, file, and work drive SpellStar will use unless you change them.

If you liked the way the controls were set up, you could just press RETURN and SpellStar would begin checking the file named.

Changing the Main Dictionary

This time, let's see how you use the controls to design a spelling check the way you want it. You'll use these same methods later to change other controls in SpellStar.

1. In response to the prompt "Control to change?", press D.
2. The following message appears on the screen below the Controls menu:

D - Dictionary: A:SPELSTAR.DCT This is the current dictionary. Enter the drive, filename, and/or extent of the main dictionary to use.

SPELSTAR.DCT is the 20,000-word dictionary that is "standard equipment" with SpellStar. Most of the time you'll find it quite sufficient.

When the Spelling Check Controls menu first appears on the screen, the current value of the main dictionary will always be SPELSTAR.DCT on the logged disk drive. (Note that the main dictionary can be on either drive, as long as you identify its location for SpellStar.) Let's pretend SPELSTAR.DCT is on the B: drive.

1. The cursor is on the first character—the drive letter— of the dictionary name. Type B: and press RETURN. (You must always press RETURN after typing in your change.)
2. Notice that on the Controls menu the current value of the main dictionary is now B:SPELSTAR.DCT.

You've just told SpellStar that the main dictionary to use, SPELSTAR.DCT, is on the B: drive.

With the "D" control, you can replace SPELSTAR.DCT with another main dictionary entirely. SpellStar will use any dictionary you name that has been organized properly. (We'll discuss in Chapter 20 how you and SpellStar do that.)

Let's suppose you have a dictionary file called "WEBSTERS.DCT" that you want to use.

1. Press D. The message you saw before appears below the Controls menu. The cursor is on the first character.
2. Type WEBSTERS, and press RETURN. (You can type WEBSTERS in upper or lower case; it doesn't matter. If you make a mistake, backspace with the "backspace" key or CTRL H (^H) and correct it. WordStar's other cursor commands don't work in this part of SpellStar.)

Notice that the new current value for main dictionary reads B:WEBSTERS.DCT.

Even though you typed in "WEBSTERS" beginning at the first character of the previous dictionary's drive letter and name, SpellStar put "WEBSTERS" in the proper place. SpellStar recognizes which part of the value you're entering and inserts it correctly.

Try this now with the dictionary name's extension, changing it to ".DCN."

1. Press D.
2. Type .DCN, and press RETURN.

The current value for main dictionary is now B:WEBSTERS.DCN.

As you've just seen, you can change the drive, filename, or extension of the main dictionary as individual elements.

You can also change the entire value all at once, simply by entering the drive letter (with colon following), the filename, and the extension (with period preceding).

You can erase any element of the current value—the drive, filename, or extension—by using the "#" key. Let's try that.

1. Press D.
2. Type #, and press RETURN.

The current value of the main dictionary should now read

B: .DCN.

You can erase the entire value for any control (except the work drive) with the space bar, if you prefer, before entering a new value.

To begin a spelling check, you must have values for the main dictionary, file to be checked, and work drive. So if you erase either the main dictionary or the file value and leave a blank, you'll have to enter a value before SpellStar will let your command to begin the spelling check take effect.

The methods with which you've just experimented in naming a main dictionary will apply to many other controls in SpellStar.

Since you want to proceed now with setting the other controls for your sample spelling check, let's change the main dictionary value back to A:SPELSTAR.DCT.

1. Press D.
2. Type A:SPELSTAR.DCT, and press RETURN.

Adding a Supplemental Dictionary

With SpellStar, you can use more than one dictionary during a spelling check. Using a main dictionary plus a supplemental dictionary to check a document may catch many more errors.

Suppose you've just finished typing a contract with many legal terms. SpellStar can use a supplemental dictionary of legal terms, in addition to the main dictionary, to check your contract. (You can buy specialized dictionaries or create your own with SpellStar.)

Another useful supplemental dictionary might contain names and addresses of your company's clients. The dictionary wouldn't help you connect the right name with the right address, but it could tell you if the name, street, city, and state were spelled correctly.

You enter or change the supplemental dictionary's name the same way you did the main dictionary's. The only difference is that if you erase the entire supplemental name by pressing the space bar, SpellStar will let you begin a spelling check without a supplemental dictionary. Entering a supplemental value is always an option.

5. When the "editing no file" menu appears, press P to print your file.
   a. Make sure your printer is connected to your computer, loaded with ribbon, and ready to print. You can get help from someone if necessary.
   b. In response to the prompt NAME OF FILE TO PRINT?, type the name of your file Letter and press ESC (ESCAPE).

Now your letter should be printed. If nothing happens, check the most likely possibilities:

- Is the printer plugged in?
- Is the switch turned on?
- Is the cable from the computer connected?
- Is the lid on the printer closed tightly?

If the answer to all these questions is yes, then you should ask someone else for help. The printer may not be working properly.

Lesson 19
Check spelling
(SpellStar option only)

In this lesson, you will learn how to "proofread" everything you write with WordStar. You will practice checking for misspellings and typos automatically, correcting the errors, and setting aside words to add to your on-disk dictionary or dictionaries. (Your WordStar program must have the SpellStar option to perform these operations.)

Note

This lesson and Lesson 20 (about maintaining SpellStar's dictionaries) assume you are using equipment with 8" disk drives. If you are using 5 1/4" disks, you will need two disks and will have to take that into account when following these instructions.

Starting SpellStar

SpellStar needs WordStar to run, so first you must get WordStar started:

1. Start your computer. (If you don't know how to do this, refer to Lesson 2 of this Training Guide.)
2. Start WordStar, logged on the A: drive. (You can refer to Lesson 2 for instructions on this also.)
3. Put a blank disk into drive B:.
4. When the "editing no file" menu appears on your screen, press S to "Run SpellStar."
5. When the prompt NAME OF FILE TO CHECK / ADD TO DICTIONARY? appears, type A:SAMPLE.TXT and press RETURN. ("SAMPLE.TXT" is a file that comes with SpellStar; you'll use it to do a spelling check.)

The Operations Menu

Next you will see SpellStar's Operations Menu, from which you can choose to run a spelling check or do dictionary maintenance. (You can also return to WordStar's "editing no file" menu at this point.)

```
        O P E R A T I O N S

C    - Check spelling
M    - Maintain dictionary
X    - Exit to WordStar no-file menu

     Operation? ■
```

In this lesson, you'll run a sample spelling check, so

1. Press C, for "Check Spelling."
2. Now a menu titled "Spelling Check Controls" will appear. You will use the controls on this menu to define the check.

Setting Up Spelling Check Controls

The controls needed for each spelling check are the names of a dictionary and a file to be checked, and the letter of a work drive. You may name a supplemental dictionary if you wish, but it's not required.

```
                SpellStar - Spelling Check Operation

SPELLING CHECK CONTROLS                          CURRENT VALUE

D  —  Use another main dictionary  =             A:SPELSTAR.DCT
S  —  Add supplemental dictionary  =
F  —  Change file to be checked    =             A:SAMPLE .TXT
W  —  Change work drive            =                       A:

<Return>  — Start spelling check
   X      — Exit to Operations Menu

Control to change? ■
```

Lesson 4
Moving the cursor

In Lesson 3 you found that certain keys can be used to move the cursor from one place on the screen to another. In this lesson you are going to take a closer look at all the different ways of moving the cursor.

Moving the Cursor One Position

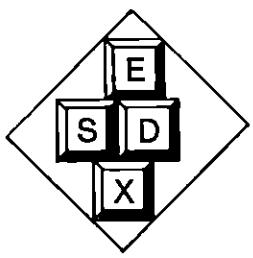
We begin by moving the cursor one position at a time. But first we have to have an open document file to work with. Follow these steps to re-open the file you named Letter:

1. When the "editing no file" menu appears on your screen, press D.
2. In response to the prompt NAME OF FILE TO EDIT?, type Letter and press RETURN.
3. Now the status line, the main menu, and the ruler line will appear in the upper half of the screen, with the first fourteen lines of your letter in the lower half. If you turned off the computer after the last chapter, you'll have to reset the ruler line(margins) for the "Letter" file.
4. While holding down the CTRL key with one finger, type C with another (for short, "Press CTRL C"). This will move the cursor down to line 12 (to the left of "with").
5. Press CTRL F five times to move the cursor across to the a in the second "as."

Now that the cursor is located in the middle of a paragraph, you can try moving the cursor around one position at a time:

1. Press CTRL D to move one position to the right.
2. Press CTRL E to move up one position (one line).
3. Press CTRL S to move one position to the left.
4. Press CTRL X to move down one position (one line)
5. Press these keys several more times in any order.

Look at the arrangement of these four keys (D, E, S, and X) on your keyboard. Note that they form an approximate diamond shape. These four keys make up what we call the "cursor control diamond." Any time you hold down the CTRL key and press one of these keys, you move the cursor one position:



In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss ^B all ^B possibilities of merging Beauty, Inc. and Heavy Dealing.

```
.. File: PRINT02
..
.fi  Guide1
.pa
.pn  1
.fi  Guide2
.pa
.pn  1
.fi  Guide3
..
.. End of file      RETURN
```

5. Press CTRL KD (^K^D) to save the file.

This file is the same as PRINT01, except for the page number commands (.pn 1), which tell WordStar to reset the page count to 1 before starting a new chapter. Once again, the page breaks are not shown here. Now you are ready to start printing:

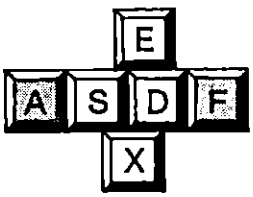
1. When the "editing no file" menu appears, type M to request a mailmerge.
2. Make sure your printer is ready and the paper is in position.
3. When the prompt NAME OF FILE TO MAILMERGE? appears, type Print02 and press ESC (ESCAPE).

You should have eight pages, numbered as follows: 1-1, 1-2, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2. Also, the numbers should be alternated from side to side, with 1-1 on the right, 1-2 on the left, and so on.

Moving the Cursor One Word

Return the cursor to the a in "as" and press CTRL F several times. Continue pressing CTRL F until the cursor reaches the end of the paragraph. Now press CTRL A several times. Continue pressing CTRL A until the cursor is back at the beginning of the paragraph.

As you look at your keyboard and the following illustration, you can see that these two keys (A and F) are also part of the "cursor control diamond." These keys move the cursor one word at a time in one direction or the other. As you just noticed, they continue moving from one line of text to another.

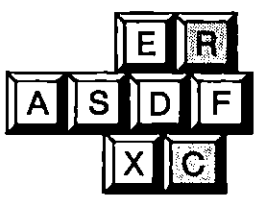


In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss ^B^Bpossibilities of merging Beauty, Inc. and Heavy Dealing.

Moving the Cursor One Screen

If the cursor is still on the I in "In," press CTRL X twice to move it down one line to the w in "with." Now at this location press CTRL R. The cursor should jump all the way up to the J in "July." Now press CTRL C to return. Press CTRL C again to move the cursor down to the J in "Jim Winters."

Looking at your keyboard and the following illustration, you can see that these two keys (R and C) are also part of the "cursor control diamond." These keys move the cursor up or down a distance of one screen. (Actually, it's about three-fourths of one screen—eleven lines of text when fourteen are displayed.)

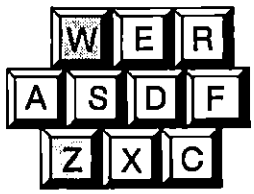


In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss ^B^Bpossibilities of merging Beauty, Inc. and Heavy Dealing.

Scrolling

At your location near the end of the letter, press CTRL W several times. The cursor will not move (unless it is on the very bottom line of the screen), but the entire display will move down one line for each CTRL W. Now press CTRL Z a few times, and watch the display move up. This is called scrolling.

Looking at your keyboard and the following illustration, you can see that these two keys (W and Z) are also part of the "cursor control diamond." The E, S, X, and D keys make up the "inner diamond," while the W, A, Z, C, F, and R keys make up the "outer diamond."



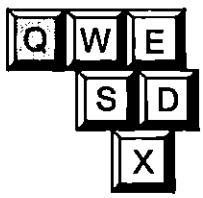
In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss ^B^Bpossibilities of merging Beauty, Inc. and Heavy Dealing.

Moving to the Edges of the Text Area

Using the cursor motion keys you have learned, move the cursor back to the word "as" in "as possible." Now hold down the CTRL key and press QS. (A shorter way of saying it is, "Press CTRL QS.") CTRL Q is the "quick" key, which makes things happen faster. So when you press CTRL QS, the cursor moves quickly to the left side of the screen. Now press CTRL QD, and watch the cursor move to the right margin.

Next, press CTRL QE, and watch the cursor move to the top of the text area. Finally, press CTRL QX (or QX for short), and watch the cursor return.

As you have probably noticed already, the four keys you have been using with CTRL Q (E, S, X, and D) are the four keys of the cursor control diamond. Without CTRL Q, they move the cursor only one position in any of four directions; with CTRL Q, they move the cursor to the edge of the text area in any direction.



In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss ^B^Bpossibilities of merging Beauty, Inc. and Heavy Dealing.

Printing with Continuous Pagination

First you will type a command file that will cause the pages to be numbered continuously from lesson to lesson:

1. Open a new file called "Print01:"
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Print01 and press RETURN.
2. When the file appears, type the following:

```
.. File: PRINT01
..
.fi  Guide1
.pa
.fi  Guide2
.pa
.fi  Guide3
..
.. End of file      RETURN
```

3. Press CTRL KD (^K^D) to save the file.

Each time you type an unconditional page command (.pa), WordStar will insert a page break in the command file, which you can ignore. For clarity, the page breaks are not shown here.

Note

The .pa command you typed at the end of Guide2 was to leave a blank page at the end of Lesson 2. (If you wanted to reproduce this printing on two-sided paper and you left a chapter with an odd number of pages, the next chapter would begin on the back of a sheet, instead of the front.)

Now you are ready to start printing:

1. When the "editing no file" menu appears, type M to request a mailmerge.
2. Make sure your printer is ready and the paper is in position.
3. When the prompt NAME OF FILE TO MAILMERGE? appears, type Print01 and press RETURN (not ESCAPE) four times.
4. When the prompt NUMBER OF COPIES (RETURN for 1)? appears, type 2 and press RETURN four more times.

You should have two eight-page copies, numbered from 1 to 8, with each number centered at the bottom of the page.

Printing with Pagination by Chapters

Now you will print the same three files with another method of pagination. This time, the chapters will be paginated separately, with the first page of chapter 1 called 1-1, the second page called 1-2, and so on. In addition, the page numbers will be alternated from side to side.

1. Add a footing to each of the pages of "Guide1":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Guide1 and press RETURN.
   c. When the file appears, press CTRL N to create a blank line at the beginning of the file.
   d. Type .fo^K at the left-hand margin, then type 1-# in columns 67-69. (Press CTRL PK to type ^K.)
   e. Press CTRL KD (^K^D) to save the file.
2. Repeat Step 1 for "Guide2" and "Guide3," using 2-# and 3-# in Step 1d in place of 1-#, as shown below.

```
.fo ^K                                        2-#

                        Lesson 2
                      Some Basics

    In this lesson, you will learn how to start and stop your
computer, and how to start and stop WordStar. You will also
learn how WordStar helps you when you need information.
```

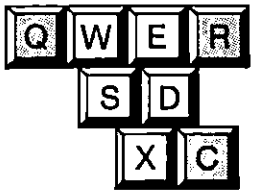
Top of Page 1 of Lesson 2

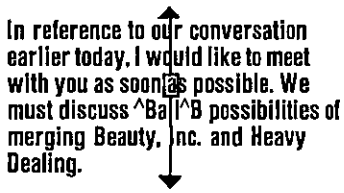
3. Open a new file called "Print02:"
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Print02 and press RETURN.
4. When the file appears, type the following:

Moving to Either End of Your File

Using the keys you have learned, move the cursor back to the middle of the first paragraph of the letter (to the "as" in "as possible"). Now press CTRL QR (^Q^R), and watch the cursor move up to the first line. Next, press CTRL QC (^Q^ C) and watch the cursor move down to the end of the file.

Once again, these two keys (R and C) are part of the cursor control diamond. Without CTRL Q (^Q), they scroll up or down a distance of one screen (actually, three-quarters of a screen); with CTRL Q (^Q), they move the cursor either up to the beginning of the file or down to the end of the file.



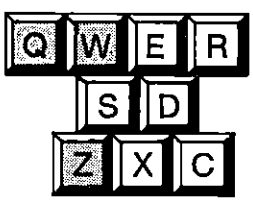

In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss ^Ba l^B possibilities of merging Beauty, Inc. and Heavy Dealing.

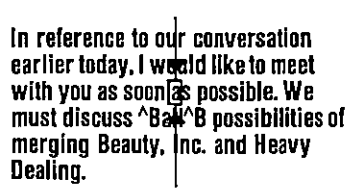
Note that CTRL QR (^Q^R) will move the cursor to the beginning of the file, regardless how large the file. However, if you have a very large file and you want to return to the beginning of the file quickly, press CTRL KS (^K^S) instead. This will save a copy of your file and move the cursor to the beginning much faster than CTRL QR (^Q^R).

Continuous Scrolling

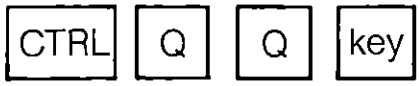
From the current location of the cursor at the end of the file, press CTRL QW (^Q^W), and watch the screen begin scrolling down (while the cursor moves up to stay on the screen). You can stop the scrolling at any time by pressing CTRL Q again or by pressing the space bar. If you press CTRL QZ (^Q^Z), the text will begin scrolling up.

These two keys (W and Z) once again complete the cursor control diamond. Without CTRL Q, these keys scroll only one line either up or down; with CTRL Q, these keys scroll continuously.




In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss ^Ba l^B possibilities of merging Beauty, Inc. and Heavy Dealing.

Repeating a Function



WordStar allows you to repeat any function (or any keystroke) many times without having to keep pressing the keys. Since this is a lesson on cursor motion, let's use a cursor motion function as an example:

1. Press CTRL QR (^Q^R) to move the cursor to the beginning of the file.
2. Press CTRL QQF (^Q^Q^F) to start the cursor moving through the text a word at a time.
3. After watching the cursor move for a while, press the space bar to stop it.

You have seen CTRL Q (^Q) used with various other keys to give you various "quick" functions. When you press CTRL Q twice, followed by a third keystroke (CTRL F in the example above), this tells WordStar to keep repeating this keystroke until you press the space bar. Try Steps 2 and 3 again, only use CTRL QQA (^Q^Q^A) in Step 2 this time. This will start moving the cursor backwards a word at a time.

Saving Your File

Early in this guide, you learned that WordStar operates in your computer and that your files are stored on diskettes. About every half hour or so, you should save a copy of the file you are working on. Then WordStar will transfer your most recent changes to diskette, where they will be stored (and where they will be safer). In this lesson you have not really made any changes to your file (Letter), so this will be just for practice.

While holding down the CTRL key, type KD. (Another way of saying this is, "Press CTRL KD." A third way of saying it is, "Press ^K^D.") WordStar will save your file on diskette and return to the "editing no file" menu.

You pressed CTRL KD this time because you were finished with the file. But other times, when you plan to save your file and then make more changes to it, CTRL KS (^K^S) is a little faster.

Again, as a caution, computers rely on electrical power, and electrical power can fail or fluctuate. So protect you files by saving them. Save them often during a typing session, and always save them at the end of a session. Never leave an unsaved file unattended while you are away from the keyboard.

Lesson 18
Chain-printing
(MailMerge option only)

In this lesson you will type three text files, representing three chapters of a book. Then you will type a command file that will print the three text files in succession. This is known as **chain-printing**, another way WordStar's MailMerge option can save you time and effort.

Typing the Text Files

You will begin by typing several pages from each of the first three lessons of this guide. Besides helping you learn chain-printing, this will give you a good review of the different things you have learned in this guide. Here's how to do this:

1. Open a new file called "Guide1":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Guide1 and press RETURN.
2. Type the first two sections of Lesson 1 of this guide ("The Keyboard" and "The Screen"), typing everything just as you see it.
   a. Here are some guidelines on spacing:
      (1) Leave three blank lines between the beginning of the file and "Lesson 1."
      (2) Leave two blank lines between the title and the first line of text.
      (3) Leave 13 blank lines between the end of the first paragraph ("... a little different.") and the figure caption ("Typical Keyboard").
   b. After the last sentence (which should be at the bottom of page 1), press RETURN three or four times to force a page break to page 2.
3. Press CTRL KD (^K^D) to save the file.
4. Open a new file called "Guide2":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Guide2 and press RETURN.
5. Type the first four sections of Lesson 2 of this guide ("Starting Your Computer," "Starting WordStar," "Stopping WordStar," and "Stopping Your Computer").
   a. Follow the format of Lesson 2, but type the procedures that apply to your own machine, rather than the procedures you find in Lesson 2 (if they are different).
   b. This should fill about two and a half pages.
   c. On a blank line after the last line of text, type .pa and press RETURN. To force a fourth page type .pa and press RETURN again.
6. Press CTRL KD (^K^D) to save the file.
7. Open a new file called "Guide3":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Guide3 and press RETURN.
8. Type the opening paragraph and the first section of Lesson 3 ("Preliminary Adjustments"). This should fill a little more than one page.
9. Press CTRL KD (^K^D) to save the file.

Now you have three files (Guide1, Guide2, and Guide3), one for each of the three opening lessons of this guide. For this exercise, these represent only about five pages of typing. In actual practice, you may have dozens of files and hundreds of pages of typing.

Lesson 5
Inserting and deleting text

In Lesson 4 you learned how to move the cursor in any direction either a short distance or a longer distance. In this lesson you will learn how to add to and delete from text you have already typed. First we need a file to work with:

1. When the "editing no file" menu appears on your screen, press D to open a document file.
2. Take a moment to look at the information on the screen.
3. In response to the prompt NAME OF FILE TO EDIT?, type Letter and press RETURN.

Inserting a New Paragraph

Now that the file is open, use the cursor motion keys you have learned to move the cursor to the blank line above "Sincerely" near the end of the letter. Now follow these steps:

1. Look at the upper right-hand corner of the screen and make sure you see "INSERT ON" on the status line. If you don't, press CTRL V (^V) to make it appear.
2. Press the RETURN key. Since automatic insertion is on, this will create an extra blank line above "Sincerely."
3. Now type the following additional paragraph exactly the way you see it:

One item 3we have to be sure to cover when we get together is is that plant we have over in Burbank. that plant we have over in Burbank. RETURN

4. Press CTRL KS (^K^S) to save your file.
5. When the text reappears, press CTRL QP (^Q^P) to return to the place where you left off last time.

As you can see, WordStar inserts the text a character at a time while you type. The first RETURN creates a blank line for you to begin typing. With this one blank line as a starting-point, you can type as much text as you like. The RETURN at the end is to create a blank line between the new paragraph and "Sincerely." There are several mistakes in the text to be corrected later. But first you are going to insert more sentences.

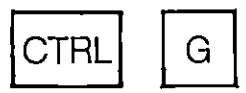
Inserting New Sentences

Now press CTRL A to return to the end of the previous line, leave two spaces after the period, and add these sentences to the paragraph you have just typed: "I need to hear what you think about this. Maybe there's more to this than we realized. Keep in touch." The paragraph should now look like this:

One item 3we have to be sure to cover when we get together is is that plant we have over in Burbank. that plant we have over in Burbank. I need to hear what you think about this. Maybe there's more to this than we realized. Keep in touch.

With WordStar, once you have found your place, there is no difference between adding a character, a word, a sentence, or even more. Just make sure the INSERT ON message is on the screen and start typing.

Deleting a Character



The first mistake we need to correct is the 3 in front of "we" in the first line of the new paragraph:

1. Use the cursor motion keys to position the cursor over the 3 in "3we."
2. Press CTRL G (^G) to delete the 3.

Summary

First of all, you learned two more dot commands in this lesson, both used to tell WordStar what value to use for a field (variable):

.av "Ask the operator to type in this field (variable) at the keyboard."

.sv "Set this field (variable) to the following value."

You have three different ways of telling WordStar what value to use for a given field (variable): read a variable (.rv), ask for a variable (.av), or set a variable (.sv).

Here is a brief description of how WordStar prints this reply letter (look at the contents of the files earlier in this lesson while you are reading this):

1. After you request a mailmerge, REPLY asks you for a file name and today's date.
2. Then REPLY switches control over to HEADING. (It's as though everything in HEADING were typed in the middle of REPLY. This is called nesting.)
3. HEADING asks for the addressee's name and address and types them, along with the salutation, using the date that REPLY asked you for, then returns control to REPLY.
4. Next REPLY prints a short paragraph and turns control over to the file you named in Step 1 (RADIO, TV, or STEREO).
5. Since you named RADIO the first time, RADIO begins by setting PRODUCT to "AM/FM clock radio" and FUNCTION to "listening enjoyment," prints the features of the radio, and returns control to REPLY.
6. REPLY now prints the closing paragraph, using the values of PRODUCT and FUNCTION set by RADIO, then prints the signature line to conclude the letter.

CTRL G (^G) deletes one character at a time. If you want to delete more than just a single character, you can use other keys.

Deleting a Word

CTRL T

The next mistake to correct is the extra "is" in the second line of the new paragraph:

1. Position the cursor over the i in the first "is."
2. Press CTRL T (^T) to delete the word.

CTRL T (^T) deletes one word at a time. This includes the space that follows the word; it also includes any punctuation that may follow the word.

Deleting a Line

CTRL Y

The third mistake to correct is the line that was typed twice:

1. Position the cursor anywhere in one of the extra lines.
2. Press CTRL Y (^Y) to delete the line.

CTRL Y (^Y) deletes one line of text from your file. There are also ways to delete part of a line.

Deleting to the Right

CTRL Q Y

The next correction to make is to delete the sentence, "Maybe there's more to this than we realized." We can't use CTRL Y here because the sentence isn't on a line by itself. So we'll begin with the part on the fifth line of the paragraph:

1. Move the cursor to the M in "Maybe."
2. Press CTRL QY (^Q^Y) to delete "Maybe there's more . . ."

CTRL QY (^Q^Y) deletes from where the cursor is located to the end of the same line (to the right). The character on which the cursor is resting is deleted. As you might have guessed, you can also delete to the left.

Deleting to the Left

CTRL Q DEL

Next, we'll delete the rest of the unwanted sentence, which is on the sixth line of the paragraph:

1. Move the cursor to the K in "Keep."
2. Press CTRL Q DEL (^Q^DEL) to delete "than we realized." (On some keyboards, DEL (DELETE) is called RUBOUT.)

CTRL Q DEL (^Q^DEL) deletes from in front of the cursor to the beginning of the same line (to the left). The character on which the cursor is resting is not deleted. This is how your new paragraph should look now:

One item we have to be sure to cover when we get together is that plant we have over in Burbank. I need to hear what you think about this.
Keep in touch.

These deletions have left both margins a little ragged. In a moment, we'll take care of that. Right now we are going to consider ways of inserting and deleting blocks of text that you have already typed.

Copying a Paragraph

CTRL K C

Suppose that after looking at your letter, you discover that you have typed this new paragraph in the wrong location. It really belongs between the other two paragraphs. WordStar allows you to copy the entire paragraph to the new location:

1. Mark the beginning of the paragraph:
   a. Move the cursor to column 1 of the line above your new paragraph (the line above "One item . . .").
   b. Press CTRL KB (^K^B) to mark the beginning of the block of text you are going to copy. (You will see <B> appear in front of the cursor.)
2. Mark the end of the paragraph:
   a. Move the cursor to column 1 of the line below your new paragraph (the line below "Keep in touch.").
   b. Press CTRL KK (^K^K) to mark the end of the block of text you are going to copy. (Either the block will become highlighted or <K> will appear.)
3. Copy the paragraph to the new location:
   a. Move the cursor to column 1 of the line between the other two paragraphs (the line above "Please call . . .").
   b. Press CTRL KC (^K^C) to copy the marked paragraph to the new location.

Deleting a Paragraph

CTRL K Y

Now you are going to go back and delete the paragraph from the old location:

1. Mark the beginning of the paragraph:
   a. Move the cursor to column 1 of the line above the paragraph (the line above "One item").
   b. Press CTRL KB (^K^B) to mark the beginning of the block of text you are going to delete. (You will see <B> appear in front of the cursor.)
2. Mark the end of the paragraph:
   a. Move the cursor to column 1 of the line below the paragraph (the line below "Keep in touch.").
   b. Press CTRL KK (^K^K) to mark the end of the block of text to be deleted. (Either the block will become highlighted or <K> will appear.)
3. Press CTRL KY (^K^Y) to delete the marked paragraph.

You don't have to copy a block of text from one location to another and then go back to the old location to delete. This has just been for the practice. WordStar has another feature that moves text from one location to another without leaving a copy behind at the old location.

```
.. File: TV (describes the portable color TV)
.sv  PRODUCT, portable color television
.sv  FUNCTION, viewing enjoyment
..
          o full channel selection
          o Big Rainbow color
          o choice of three sizes
            * portable
            * briefcase size
            * pocket size
.. End of file      RETURN.
```

3. Press CTRL KD (^K^D) to save your file.

The Third Product File

Finally we prepare the third product file:

1. Open a new file called "Stereo":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Stereo and press RETURN.
2. When the new file appears on the screen, type the following:

```
.. File: Stereo (describes the stereo system)
.sv  PRODUCT, stereophonic system
.sv  FUNCTION, listening enjoyment
..
          o acoustic suspension speakers
          o Full stereophonic sound
          o Elliptical, 1.5-gram cartridge
          o choice of three colors
            * Brick Road yellow
            * Emerald green
            * Black and white
.. End of file RETURN
```

3. Press CTRL KD (^K^D) to save your file.

Having the Reply Letter Printed

Now you have a matrix letter to answer inquiries about products, along with four accompanying files. Here is how to have a reply letter typed:

1. When the "editing no file" menu appears, type M to request a mailmerge.
2. Make sure your printer is ready to go, with the paper in position.
3. When the prompt NAME OF FILE TO MAILMERGE? appears, type Reply and press ESC (ESCAPE) to begin printing.
4. In reply to the prompt "Enter one file name (RADIO/TV/STEREO): ", type Radio and press RETURN.
5. Answer the remaining questions as indicated, pressing RETURN after each response:

```
Please enter today's date: June 15, 1981
Addressee's name and title: Mr. James V. Thompson
Addressee's company: Rampant Electronics, Inc.
Street address: 1307 Helsinn Boulevard
City, state, and zip: Cupertino, CA 95014
Dear Mr. Thompson
```

6. WordStar will now print the letter, which should look like this:

Mr. James V. Thompson — June 15, 1981
Rampant Electronics, Inc.
1307 Helsing Boulevard
Cupertino, CA 95014

Dear Mr. Thompson:

Thank you for your recent inquiry. The following features are available for you to select from:

- o automatic tuning selection
- o AC/DC selection
- o choice of one of three wake-up methods
  - * soft music
  - * Chinese gong
  - * "Stars and Stripes Forever"

We were happy to hear from you. We hope that our AM/FM clock radio will contribute to your listening enjoyment. Let me know if I can be of any further assistance.

Sincerely,

Henry L. ("Ham") Burger
Director of Marketing

7. Press the space bar to return to the "editing no file" menu.
8. Repeat Steps 1-7, using either "TV" or "Stereo" in Step 4 and making up your own entries for Step 5.

Moving a Paragraph

CTRL K V

After looking at your letter for a while, you decide that the new paragraph you've inserted really belongs at the end as a postscript. You can move the paragraph to the end of the letter with one command after marking it:

1. Mark the beginning of the paragraph:
   a. Move the cursor to column 1 of the line above the paragraph (the line above "One item . . .").
   b. Press CTRL KB (^K^B) to mark the beginning of the block of text you are going to move. (You will see <B> appear in front of the cursor.)
2. Mark the end of the paragraph:
   a. Move the cursor to column 1 of the line below the paragraph (the line below "Keep in touch.").
   b. Press CTRL KK (^K^K) to mark the end of the block of text you are going to move. (Either the block will become highlighted or <K> will appear.)
3. Move the paragraph to the new location:
   a. Move the cursor to column 1 of the blank line above the initials (the line above "JW/sl").
   b. Press CTRL KV (^K^V) to move the marked paragraph. (No copy will be left at the previous location.)

Inserting "P.S."

Now for a final touch you can insert "P.S. " in front of the paragraph you just moved:

1. Press CTRL KH (^K^H) to turn off the highlighting (and hide the markers).
2. Move the cursor to the O of "One item . . .".
3. Look at the upper right-hand corner of the screen to check for "INSERT ON." If it isn't there, press CTRL V (^V) to make it appear.
4. Type "P.S. " (with a space after the second period) in front of "One item . . .".
5. Press CTRL B (^B) to reform the paragraph.
6. Press CTRL KD (^K^D) to save your file.
7. Look at the directory for LETTER.BAK, your backup file.

Any time you mess up a paragraph with insertions or deletions, you can tidy it up again by pressing CTRL B (^B). You can press ^B either at the beginning of the paragraph or at any line further down, as long as the cursor precedes the untidy places.

Printing Your File

Just for practice, you can now print your file on your printer:

1. When the "editing no file" menu appears, press P. (Make sure the printer is ready and that the paper is lined up at the right position.)
2. When the prompt NAME OF FILE TO PRINT? appears, type Letter and press ESC (ESCAPE). Now your letter will be printed with the new paragraph.

The Heading File

As you can see from looking at this letter, you are going to need several other files (HEADING, RADIO, TV, and STEREO) before you will be able to use it. We can begin by typing the heading file:

1. When the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type Heading and press RETURN.
3. When the new file appears on the screen, type the following:

```
. . File:   HEADING (provides the standard heading and salutation)
.av   "Addressee's name and title: ", TITLE
.av   "Addressee's company: ", COMPANY
.av   "Street address: ", ADDRESS1
.av "City, state, and zip: ", ADDRESS2
.av "Dear ", NAME
.cs

&TITLE&                                    &DATE&
&COMPANY&
&ADDRESS1&
&ADDRESS2&

Dear &NAME&:
. . End of file      RETURN
```

4. Press CTRL KD (^K^D) to save your file.

The First Product File

Next we go on to the three product files. One of these will be inserted as the middle paragraph of the reply. Here is the first one:

1. Open a new file called "Radio":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Radio and press RETURN.
2. When the new file appears on the screen, type the following:

```
. .   File: RADIO (describes the AM/FM clock radio)
.sv   PRODUCT, AM/FM clock radio
.sv   FUNCTION, listening enjoyment
. .
          o automatic tuning selection
          o AC/DC selection
          o choice of one of three wake-up methods
            * soft music
            * Chinese gong
            * "Stars and Stripes Forever"
. . End of file      RETURN
```

3. Press CTRL KD (^K^D) to save your file.

The Second Product File

Next we prepare the second product file:

1. Open a new file called "TV":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type TV and press RETURN.
2. When the new file appears on the screen, type the following:

July 22, 1981

Bill Somers, President
Beauty, Inc.
485 Avenida de las Guapas
Los Angeles, California 90036

Dear Mr. Somers:

In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss **all** possibilities of merging Beauty, Inc. and Heavy Dealing.

Please call my secretary to set an appointment at your earliest convenience.

Sincerely,

Jim Winters, President
Heavy Dealing, Inc.

P.S. One item we have to be sure to cover when we get together is that plant we have over in Burbank. I need to hear what you think about this. Keep in touch.

JW/sl

Summary

In this lesson you have learned how to insert a sentence, a paragraph, or any amount of text into your file, using INSERT ON. You have also learned how to delete a character, a word (or part of a word), an entire line, or part of a line:

CTRL G

CTRL Y

CTRL DEL

One item ~~a~~we have to be sure to cover when we get together ~~is~~ is that plant we have over in Burbank. ~~that plant we have over in Burbank~~. I need to hear what you think about this. ~~Maybe there's more to this than we realized~~. Keep in touch.

CTRL T

CTRL QY

In addition, you have learned how to set markers at each end of a block of text:

Lesson 17

Typing reply letters

(MailMerge option only)

In Lesson 15 you typed a form letter that could be addressed to many different people. Each addressee got the same letter. Now you will learn how to type another kind of form letter, a reply letter. This time, you will not be mailing a large number of identical letters. Instead, you will be mailing only one letter at a time, but the wording may vary from letter to letter.

Preparing the Matrix Letter

Instead of converting a sample letter into a matrix letter by making substitutions, as you did in Lesson 15, you will type the matrix letter directly this time:

1. Open a new file called "Reply":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Reply and press RETURN.
2. Press CTRL OJ (^O^J) to turn.off justification.
3. When the new file appears on the screen, type the following letter:

```
.. File: REPLY (prints a reply letter using RADIO, TV, or
..       STEREO for description)
.cs
.av   "Enter the file name (RADIO/TV/STEREO): ", FILENAME
.av   "Please enter today's date: ", DATE
..
.fi   HEADING              (standard letter heading and salutation)

      Thank you for your recent inquiry. The following features
are available for you to select from:

.fi   &FILENAME&

      We were happy to hear from you. We hope that our &PRODUCT&
will contribute to your &FUNCTION&. Let me know if I can be of
any further assistance.

                                   Sincerely,

                                   Henry L. ("Ham") Burger
                                   Director of Marketing     RETURN
```

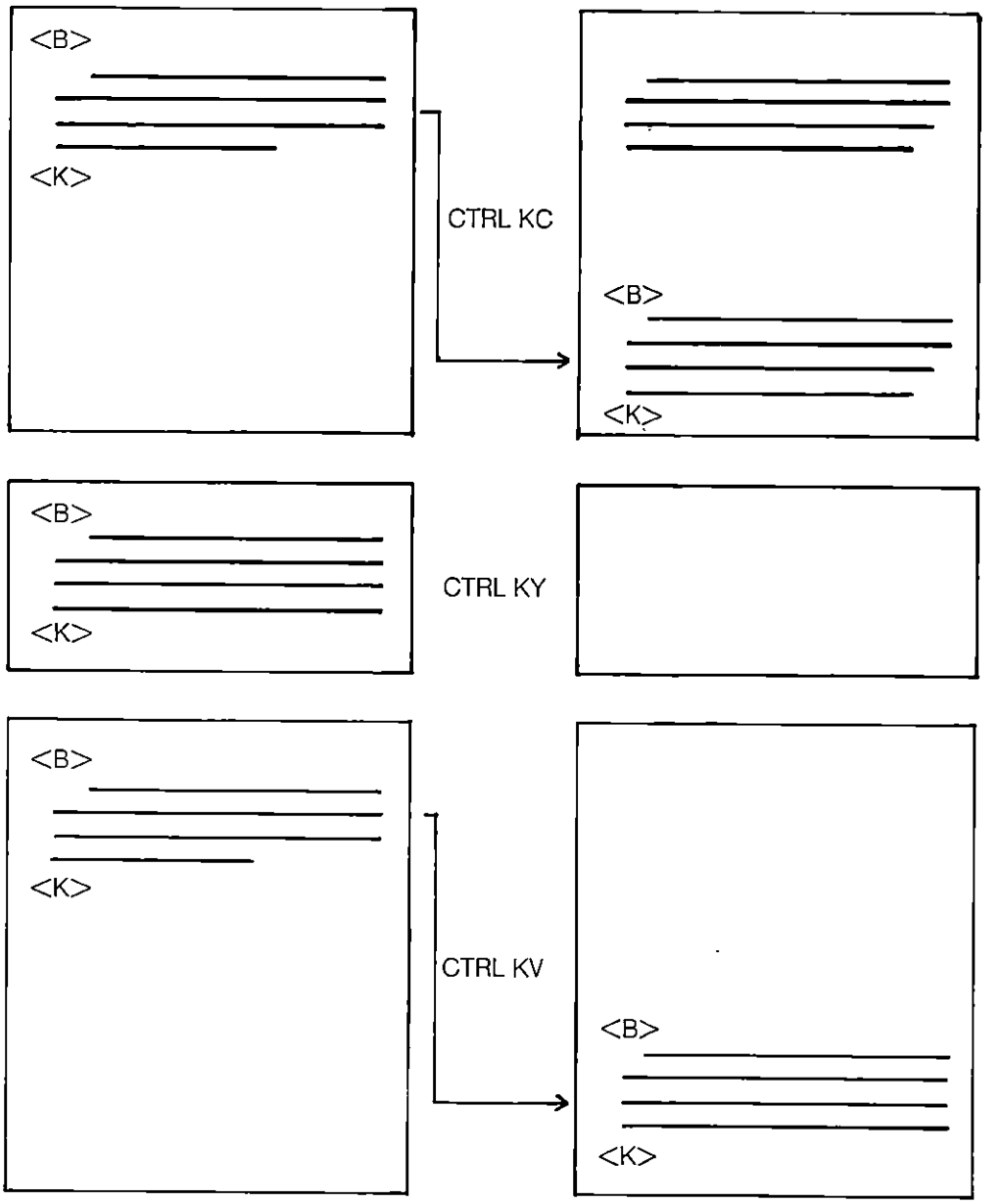
4. Press CTRL KD (^K^D) to save your file.

<B> (CTRL KB)

One item we have to be sure to cover when we get together is that plant we have over in Burbank. I need to hear what you think about this.

Keep in touch.
<K> (CTRL KK)

Finally, you have learned how to copy, delete, or move a paragraph (or any other block of text that has been marked):



Summary

The documents you have been typing to produce special printing all contain a number of three-character commands that begin with periods (dots). These are called dot commands. Here is a summary of the dot commands you have seen so far, and what they mean to WordStar:

..	"Ignore this line. This line is for comments (or to leave some open space in the file)."
.op	"Turn off page-numbering when you print this document."
.pa	"Go to a new page right here."
.cp	"Here is a number. If this number of lines won't fit on this page, move all of them to the next page."
.pl	"The length of each page of printing is as follows."
.mt	"Allow the following top margin on each page before printing anything."
.mb	"Allow the following bottom margin after printing one page."
.df	"The name of the data file for this matrix file is as follows." (MailMerge only)
.rv	"For each item to be printed, read the following fields (variables) from a record in the data file. You don't have to use all of them during printing." (MailMerge only)
.fi	"Insert the following file right here. In other words, print everything in that file here, then come back to this file to continue printing." (MailMerge only)
.cs	"Clear the open area of the screen." (MailMerge only)
.dm	"Display the following information on the screen." (MailMerge only)

Lesson 6
Forming paragraphs

In this section you will learn how to enter paragraphs correctly, how to split one paragraph into several, and how to merge several paragraphs into one. You will also learn how to select unjustified right margins and how to select double or triple spacing.

First, you will create a new document file and (if you haven't exited from WordStar since Lesson 5) reset the original margins.

1. Create a new file called "Control":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO CREATE OR EDIT? appears, type Control and press RETURN.
   c. First the WAIT and NEW FILE messages will appear on the screen, then the file will be ready.
2. Reset the left margin to column 1 (if necessary):
   a. Press CTRL OL (^O^L) to request a new left margin.
   b. When the question LEFT MARGIN COLUMN NUMBER? appears, type 1 and press RETURN.
3. Reset the right margin to column 65 (if necessary):
   a. Press CTRL OR (^O^R) to request a new right margin.
   b. When the question RIGHT MARGIN COLUMN NUMBER? appears, type 65 and press RETURN.

Typing Separate Paragraphs

Enter the following text exactly as you see it here:

The CTRL key on your keyboard is very similar to the SHIFT key in many ways. First of all, you always press it while you are pressing another key; pressing it by itself doesn't do anything. Like the SHIFT key, the CTRL key changes what happens when you press some other key. And like the SHIFT key, the CTRL key is located near the left side of the key cluster. However, pressing the CTRL key while you are pressing another key does not usually produce a visible character on the screen and never produces a printed character. **RETURN**
RETURN
Instead of saying, "While holding down the CTRL key with one finger, press O with another," we can be briefer by just saying, "Press CTRL O." This is like saying, "Press SHIFT O." The difference is that pressing CTRL O will activate a WordStar function, while pressing SHIFT O will merely display a capital letter O on the screen. If we want to be even briefer still, we can say, "Press O" instead of, "Press CTRL O." **RETURN**

```
.. File:  FORMAT3 (print a formatted mailing list)
.op       Turn off page-numbering
.pl 8     Set the page length to 8 lines
.mt 2     Set the top margin to 2 lines
.mb 2     Set the bottom margin to 2 lines
.cp 6     Set a conditional page break (6 lines)
.df LIST3.DAT
.rv N, TITLE, COMPANY, ADDRESS1, ADDRESS2, NAME, LOCAL
&n&           &title&
              &company&
              &address1&
              &address2&
.cs
.dm NOW PRINTING RECORD FOR &title&
.. End of file      RETURN
```

3. Press CTRL KD (^K^D) to save your file.

Typing a Command File

Whenever you want to combine several tasks into one, MailMerge allows you to type one special file, called a command file, to have these tasks performed for you. This command file will call the other files for you and print them in succession while you go on to some other work. Here are the steps for this particular command file:

1. Open a new file called "Combine3":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Combine3 and press RETURN.
2. When the file appears, type the following:

```
.dm     This program will perform four tasks in succession:
.dm     (1) print a series of letters, (2) print the envelopes
.dm     (3) print mailing labels, (4) print the data file
.dm     Task 1: Print the letters
.fi  MAILING3
.dm     Task 2: Print the envelopes
.dm                 Get the envelopes ready
.fi  ENVELOP3
.dm     Task 3: Print the mailing labels
.dm                 Put the labels into the feeder
..      Press CTRL PC (^P^C) to insert ^C
^C
.fi  LABEL3
.dm     Task 4: Print the mailing list
.dm                 Put the paper back into the feeder
..      Press CTRI PC (^P^C) to insert ^C
^C
.fi  FORMAT3
```

3. Press CTRL KD (^K^D) to save your file.

Running the Command File

Now that you have a command file, along with four files that are called by the command file, you are ready to start:

1. When the "editing no file" menu appears, type M to request a mailmerge.
2. Make sure your printer is ready to go, with the paper in position.
3. When the prompt NAME OF FILE TO MAILMERGE? appears, type Combine3 and press ESC (ESCAPE) to begin printing:
   a. The letters will be printed first, with no action required by you.
   b. After the last letter has been printed, you will have to begin inserting the envelopes one at a time, as indicated by screen messages.
   c. After the last envelope has been addressed, you will have to insert the roll of mailing labels during the next printing pause.
   d. After the last label has been addressed, change back to paper again during the printing pause.

After the mailing list has been printed, WordStar will return you to the "editing no file" menu. You now have five letters, five envelopes, five mailing labels, and a mailing list with five names on it.

Even though you have already typed this text as two separate paragraphs, WordStar makes it easy for you to change this.

Joining Paragraphs

Just for practice, you will first join the two paragraphs you have typed into one larger paragraph:

1. Move the cursor just past the last word of the first paragraph (to the first blank space past "character."), as follows:
   a. Place the cursor in the left-hand margin of the blank line between the two paragraphs.
   b. Press CTRL A (^A) to move the cursor back up to the end of the previous line.
2. Press the space bar twice to leave room between the two sentences.
3. Press CTRL G (^G) twice.
   a. With the first CTRL G, the blank line between the paragraphs will vanish.
   b. With the second, the first word of the second paragraph will move to the cursor.
4. Press CTRL B (^B) twice to reform the new paragraph.

Splitting a Paragraph

Now you are going to split into smaller paragraphs the larger paragraph you have just formed:

1. Using the cursor control keys you have learned, move the cursor to the H in "However, . . ." in the sixth line.
2. With INSERT ON showing in the upper right-hand corner of the screen, press RETURN twice.
   a. With the first RETURN, "However, . . ." moves to a separate line.
   b. With the second, a blank line appears between the new paragraphs.
3. Press CTRL B (^B) to reform the second paragraph.
4. Repeat Steps 1-3 to form a third paragraph beginning with "Instead of . . . ."

Even though you entered this text in block style, there's nothing to keep you from changing that now.

Changing to Indented Paragraphs

WordStar makes it easy for you to change to indented paragraphs after you have already typed them:

1. Move the cursor to the beginning of the first paragraph (the T in "The CTRL key . . .").
2. With INSERT ON showing in the upper right-hand corner of the screen, press CTRL I (^I) to indent the first line of the paragraph to the first tab stop.
3. Press CTRL B (^B) to reform the paragraph.

You will see the cursor stop in the middle of "anything." This is WordStar's way of asking you if you want to hyphenate this word. To hypenate, back the cursor up to the t and press the key (-). Now WordStar will continue reforming.

Hyphenating Words During Reform

Repeat Steps 1-3 for the second two paragraphs. While you are reforming the second paragraph, WordStar will stop to hyphenate "another."

1. If you don't want to hyphenate "another," just press CTRL B (^B) again. WordStar will move "another" to the next line and go on.
2. If you want to hyphenate "another," use CTRL S (^S) to back up the cursor to the o and press the hyphen key. WordStar will place a hyphen after "an" and then go on to the end of the paragraph.

Just for practice, reform the paragraph twice, once without hyphenation and once with hyphenation. (If you have already reformed with hyphenation, just leave the paragraph that way.) Note that the hyphen may appear highlighted on your screen. The highlighting tells you that this hyphen will be printed only if it falls at the end of a line (which it does right now). If your screen doesn't show highlighting, this is still true.

Rejoining Paragraphs

Now you are going to rejoin the first and second paragraphs:

1. Using the cursor control keys you have learned, move the cursor past the last word in the first paragraph, with two spaces between the period and the cursor. (CTRL F or CTRL A should do this automatically.)
2. Press CTRL G (^G) twice to bring the two paragraphs together.
3. Press CTRL G (^G) five more times to remove the indentation.
4. CTRL B (^B) to reform the new paragraph.
5. Press CTRL KD (^K^D) to save a copy of your file.

Now the text is about the way it was when you first entered it, except that each paragraph begins with an indented line.

Printing Your File

To print your completed file, follow these steps:

1. When you see the "editing no file" menu, press P to request printing. (Make sure the printer is ready and the paper is positioned correctly.)
2. When the prompt NAME OF FILE TO BE PRINTED? appears, type Control and press ESCAPE. Your file will be printed on the printer.

Printing Double-Spaced, Unjustified

Just to illustrate some of the choices you have in printing, you will now print the same file with double-spacing and an unjustified right margin:

1. Open the file named "Control:"
   a. When the "editing no file" menu appears, press D to open your file again.
   b. When the prompt NAME OF FILE TO CREATE OR EDIT? appears, type CONTROL and press RETURN.
2. Set double-spacing:
   a. Press CTRL OS (^O^S).

3. Read the comments to see what each command is used for. (The comments are not required, but are provided here to help you learn the commands.)
4. Press CTRL KD (^K^D) to save your file.

You now have a document file called "Envelop3" that you can use as a matrix to address your mailing envelopes one at a time. This matrix calls for an envelope height of 25 lines, a top margin of 15 lines, a left margin of 30 characters, and single-spacing. (To print with double-spacing, change the top margin to 10 and leave blank lines between the lines of addressing.) You are ready to print the envelopes:

1. When the "editing no file" menu appears, type M to request a mailmerge.
2. Make sure your printer is ready to go, with the first envelope in position.
3. When the prompt NAME OF FILE TO MAILMERGE? appears, type Envelop3 and press ESC (ESCAPE) to begin printing.
4. Press P each time you are ready to address a new envelope. (If you forget, look at the "editing no file" menu, where you will see P = CONTINUE PRINT.)

When you have finished positioning the last envelope, WordStar will print and then return you to the "editing no file" menu. You now have five mailing envelopes to match your five letters.

Printing Mailing Labels

To print single-column mailing labels for the people on your mailing list, you can use the same data file again with still another matrix. (To print multi-column labels, see Section 10 of the WordStar Reference Manual.) Here is how to type the matrix:

1. Open a new file called "Label3":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Label3 and press RETURN.
2. When the file appears, type the following information (the comments can help):

```
..      File: LABEL3 (print mailing labels from LIST3.DAT)
.op     Turn off page numbering
.pl 18  Page length = 18 lines (this may vary)
.mt 8   Allow a top margin of 8 lines
.mb 6   Allow a bottom margin of 6 lines
.df LIST3.DAT (the data file is LIST3.DAT)
.rv N, TITLE, COMPANY, ADDRESS1, ADDRESS2, NAME, LOCAL
        &TITLE&
        &COMPANY&
        &ADDRESS1&
        &ADDRESS2&
.. End of file      RETURN
```

3. Press CTRL KD (^K^D) to save a copy of your file.

You now have a document file called "Label3" that you can use as a matrix to print your mailing labels on a continuous roll. This matrix calls for a label height of 18 lines, a top margin of 8 lines, a bottom margin of 6 lines, a left margin of 10 characters, and single-spacing. (To print with double-spacing, change the top margin to 5, the bottom margin to 5, and leave blank lines between the the lines of addressing.) You are ready to print the labels:

1. When the "editing no file" menu appears, type M to request a mailmerge.
2. Make sure your printer is ready to go, with the roll of labels in position.
3. When the prompt NAME OF FILE TO MAILMERGE? appears, type Label3 and press ESC (ESCAPE) to begin printing.

Now WordStar will print five mailing labels to match your five letters and envelopes.

Combining Three Tasks into One

In Lesson 15 and this lesson you have printed a series of letters, followed by corresponding envelopes and mailing labels. Now you will learn how to combine all three of these tasks into one task. So far you have typed files with these names:

- MAILING3 (matrix for the letters)
- ENVELOP3 (matrix for the envelopes)
- LABEL3 (matrix for the mailing labels)

All three of these matrices drew from the same data file of names and addresses (LIST3.DAT). In this lesson you will type an additional matrix file to print your data file in a readable format. Then you will type a simple command file to have all four printed in succession.

As you have probably noticed, your data file of names and addresses is difficult to read. If you had to make any changes to it, you would not have an easy time finding anything. So why not print it in a more readable format and make your job easier? Here are the steps:

1. Open a new file called "Format3":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Format3 and press RETURN.
2. When the file appears, type the following:

b. When the prompt "ENTER space OR NEW LINE SPACING (1-9): " appears, type 2 (no RETURN required).
c. LINE SPACING 2 will appear in the upper right-hand corner of the screen (on the status line).

3. Turn off justification:
   a. Press CTRL O (^O).
   b. If the menu shows that justification is now ON, press CTRL J (^J) to turn it off.
   c. If the menu shows that justification is already OFF, press the space bar to leave it that way.
   d. The next time you type ^O^J, you will turn justification back on again.
4. Reform the first paragraph:
   a. Leave the cursor at column 1 of the first line of the first paragraph ("The CTRL key . . .").
   b. Press CTRL B (^B) to reform the paragraph.
5. Reform the second paragraph:
   a. Move the cursor down to column 1 of the first line of the second paragraph ("Instead of . . .").
   b. Press CTRL B (^B) to reform the paragraph.
6. Print your file again:
   a. When you see the "editing no file" menu, press P to request printing.
   b. When the prompt NAME OF FILE TO BE PRINTED? appears, type Control and press ESCAPE.
   c. The printed result should look like this:

The CTRL key on your keyboard is very similar to the SHIFT key in many ways. First of all, you always press it while you are pressing another key; pressing it by itself doesn't do anything. Like the SHIFT key, the CTRL key changes what happens when you press some other key. And like the SHIFT key, the CTRL key is located near the left side of the key cluster. However, pressing the CTRL key while you are pressing another key does not usually produce a visible character on the screen and never produces a printed character.

Instead of saying, "While holding down the CTRL key with one finger, press O with another," we can be briefer by just saying, "Press CTRL O." This is like saying, "Press SHIFT O." The difference is that pressing CTRL O will activate a WordStar function, while pressing SHIFT O will merely display a capital letter O on the screen. If we want to be even briefer still, we can say, "Press O" instead of, "Press CTRL O."

Lesson 16

Envelopes and mailing labels

(MailMerge option only)

In Lesson 15 you printed five form letters. In this lesson you will address envelopes to mail the letters in and prepare mailing labels for some accompanying mail.

Addressing Envelopes

To address envelopes for mailing your five letters, you can use the same data file with a different matrix. Here is how to type the new matrix:

1. Open a new file called "Envelop3":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Envelop3 and press RETURN.
2. When the file appears, type the following information:

```
.. File: ENVELOP3 (print envelopes from LIST3.DAT)
.. File: EN
..
.op       Turn off page numbering
.pl 25    Page length = 25 lines (ordinary envelope)
.mt 15    Allow a top margin of 15 lines
.mb 0     Allow no bottom margin (0 lines)
..
.df LIST3.DAT (the data file is LIST3.DAT)
..
..        Read these seven fields (variables),
..        one record at a time:
.rv N, TITLE, COMPANY, ADDRESS1, ADDRESS2, NAME, LOCAL
..        Press CTRL PC (^P^C) to insert ^C
..        (wait for the next envelope)
^C
                              &TITLE&
                              &COMPANY&
                              &ADDRESS1&
                              &ADDRESS2&
.pa       Roll envelope out of the printer      RETURN
```

Line Spacing and Justification

You can set any line spacing from 1 to 9 by pressing ^O^S, and typing a number. When you set a value other than 1 (single-spacing), e.g., 2 (double-spacing), you will see a message in the upper right-hand corner of your screen (LINE SPACING 2). You probably won't have many occasions to use any setting other than 1, 2, or 3 for line spacing.

You can turn off justification of the right margin by pressing ^O^J once. The next time you press ^O^J, you will turn justification back on again. You can always tell whether you have turned justification on or off by looking at the text you are typing. Another way to tell is to press ^O and look at the menu after J (either ON or OFF will appear highlighted). If you don't want to change it, just press the space bar.

If you select double spacing and unjustified right margins before you begin typing, then you will see the text appear with these features on the screen. But if you have already typed the text and then select these features, nothing will happen to your text until you reform each paragraph one at a time. This means that WordStar allows you to change the settings as often as you like, which means, in turn, that you could type each paragraph of your file with different settings for printing.

Any WordStar features you select will remain in effect until you exit from WordStar, even if you switch to a different file.

End of the Short Course

This concludes the Short Course. At this point, you don't know all the features of WordStar, but you know enough to handle most ordinary typing jobs. Here is a quick summary of what you have covered:

Lesson 1. You learned how the keyboard, screen, diskettes, disk drives, and printer work together while you are typing.

Lesson 2. You learned how to start your computer and WordStar, how to stop WordStar and your computer, and how WordStar helps you while you are typing.

Lesson 3. You learned how to create a document file and type a letter. You also learned how to use many WordStar functions for making corrections and how to print the letter.

Lesson 4. You learned how to move the cursor one position, one word, or one screen in either direction. You also learned how to scroll the screen up or down, move the cursor to the edge of the text area, move the cursor to either end of the file, and repeat a keystroke or WordStar function.

Lesson 5. You learned how to insert text with INSERT ON and how to delete a character, a word, a line, or part of a line. You also learned how to copy, delete, or move a block of text.

Lesson 6. You learned how to join two paragraphs together and split one paragraph into two. You also learned how to change block paragraphs to indented paragraphs, how to reform a paragraph, and how to hyphenate words during a paragraph reform. Finally, you learned how to specify line spacing and right-justification.

You have created these files:

PRACTICE (Lesson 2)
LETTER (Lesson 3)
CONTROL (Lesson 6)

If you plan to repeat the Short Course, you can delete these files now, using either WordStar's deletion command or your operating system's deletion command. Here is how to use WordStar's deletion command for the first file (PRACTICE):

1. When the "editing no file" menu appears, press Y to delete a file.
2. When the prompt NAME OF FILE TO DELETE? appears, type Practice and press RETURN.

If you should forget these rules and type the data file incorrectly, you could end up with letters that look like this:

July 22, 1981
Bill Somers
President
Beauty
Inc.

Dear 485 Alameda de las Guapas:

In reference to our conversation earlier today, I would like to meet with you as soon as possible. We must discuss all possibilities of merging President and Heavy Dealing.

Please call my secretary to set an appointment at your earliest convenience.

Sincerely,

Jim Winters, President
Heavy Dealing, Inc.

P.S. One item we have to be sure to cover when we get together is that plant we have over in Los Angeles. I need to hear what you think about this. Keep in touch.

JW/sl

Typing the Data File

Your next task is to type the data file, which contains the specific names and addresses that will be inserted into the matrix letter:

1. Open a file called "LIST3.DAT":
   a. When the "editing no file" menu appears, press N (not D) to create a **non-document file.**
   b. When the prompt NAME OF FILE TO EDIT? appears, type LIST3.DAT and press RETURN.
   c. You will see the messages "WAIT" and "NEW FILE" appear on the screen.
2. When the messages leave and the file is ready, type the following five lines of information (each line is continued as one line until you press RETURN):

1, "Bill Somers, President", "Beauty, Inc.", 485 Avenida de las Guapas, "Los An geles, California 90036", Mr. Somers, Burbank **RETURN**
2, "Running Bear, Chief", Papoose-a-Plenty, North River Fork, "Little Big Horn, Montana 59107", Chief, Billings **RETURN**
3, "Henry Howe, Chairman", Mixed Reactions, 12736B North Central Avenue, "New Y ork, New York 10024", Mr. Howe, Queens **RETURN**
4, "Jane Southern, President", Interiors Unlimited, 7 Rue d'Elegance, "New Orle ans, Louisiana 70149", Mrs. Southern, Baton Rouge **RETURN**
5, "James Beauregard, Executive", Sumptuous Dining, 901 Gastronomic Parkway, "D enver, Colorado 80201", Mr. Beauregard, Colorado Springs **RETURN**

4. Press CTRL KD (^K^D) to save your data file.

Each entry line, or record, in your data file contains seven items, or fields, separated by commas. (When a field contains a comma of its own, as "Beauty, Inc." does, it must be typed within quotation marks.) The seven fields in each line correspond to the seven generic names, or variables, you used in the matrix letter. For example, in the third record,

N = 3
TITLE = Henry Howe, Chairman
COMPANY = Mixed Reactions
ADDRESS1 = 12736B North Central Avenue
ADDRESS2 = New York, New York 10024
NAME = Mr. Howe
LOCAL = Queens

Because there are five records in your data file, five letters will be printed.

Printing the Form Letters

With your matrix letter and your data file completed, you are ready to begin printing:

1. When the "editing no file" menu appears, type M to request a mailmerge.
2. Make sure your printer is ready to go, with the first page aligned correctly.
3. When the prompt NAME OF FILE TO MAILMERGE? appears, type Mailing3 and
   a. If you are printing on continous form paper, press ESC (ESCAPE) to begin printing.
   b. If you are printing each letter on a separate sheet of stationery, press RETURN seven times, press Y for PAUSE FOR PAPER CHANGE BETWEEN PAGES (Y/N): ■, then press RETURN two more times to begin printing.

Now WordStar will print five letters on the printer, using the five lines of your data file to insert information into your matrix letter. You can see that WordStar made allowance for words of different lengths that had to be inserted, and reformed paragraphs when necessary. Note also that the first letter is identical to the letter you typed in Lesson 3.

Rules for Typing a Data File

Follow these rules whenever you type a data file:

- Use a non-document file
- Begin each record with a record number
- Separate fields with commas
- Use quotation marks around fields that contain commas of their own (type the closing quotation mark before the next comma)
- Never leave out a field; if you don't know what to enter, just type a blank space followed by a comma
- End each record by pressing RETURN
- Whenever possible, use **DataStar** to enter data files

Intermediate Course

7 Margins, Tabs, and Centering
- Centering Text
- Indenting Text
- Printing Your File
- Changing the Margins
- Restoring the Original Margins
- Changing the Tabs

8 Typing Tables
- Typing a Simple Table
- Typing a Table with Decimal Amounts
- Resetting the Tabs
- Typing the Table
- Printing the Table
- Ordinary Tabs and Decimal Tabs

9 Creating Special Effects: Part 1
- Typing Boldface Text
- Double-Striking
- Underlining
- Striking Out Words
- Summary

10 Creating Special Effects: Part 2
- Typing Subscripts
- Typing Superscripts
- Typing Strikeovers
- Typing Non-Break Spaces
- Combining Special Effects

11 Finding and Replacing Text
- Setting Place Markers
- Moving to Place Markers
- Finding a String
- Disregarding Case
- Searching for Whole Words
- Replacing One String with Another
- Automatic Replacement
- Summary

12 Handling Blocks and Files
- Saving Your File and Continuing
- Saving Your File and Going to Another WordStar Operation
- Saving Your File and Stopping WordStar
- Abandoning a File
- Marking a Block
- Moving a Block
- Copying a Block
- Deleting a Block
- Writing a Block to Another File
- Reading One File into Another
- Summary: Moving Text from One File to Another
- Copying a File
- Renaming a File
- Deleting a File
- Restoring a Lost File from the Backup File

b. Type &ADDRESS2& over the address and press CTRL QY (^Q^Y) to delete whatever is left over.

5. Replace the name in the salutation with &NAME&:
   a. Move the cursor to the M in "Dear Mr. Somers."
   b. Type &NAME& over "Mr. Somers" and delete the last four letters of "Somers" (but leave the colon).
6. Replace the company name with &COMPANY& again:
   a. Move the cursor to the B in "Beauty, Inc." near the end of the first paragraph.
   b. Type &COMPANY& over "Beauty, Inc." and press CTRL T to delete the last three letters of "Inc." (but leave the space before "and").
   c. It won't be necessary to reform the paragraph.
7. Replace the name of the local city with &LOCAL&:
   a. Move the cursor to the B in "Burbank" in the postscript.
   b. Type &LOCAL& over "Burbank" (leave the period).
8. Press CTRL QC (^Q^C) to move the cursor to the end of the file.
9. On a blank line type .pa to tell WordStar to start each letter on a new page.
10. Press CTRL KD (^K^D) to save your file.

You have added five lines of instructions to WordStar (four at the beginning, one at the end) and replaced each specific name or address with a generic name. This changes the sample letter into a matrix letter, ready to receive information from a date file. WordStar will fill information into the places where the generic names are located in the matrix letter. This is how the matrix letter should look on the screen:

```
.. File: MAILING3
.op
.df LIST3.DAT
.rv N, TITLE, COMPANY, ADDRESS1, ADDRESS2, NAME, LOCAL.

                                        July 22, 1981

                                        &TITLE&
                                        &COMPANY&
                                        &ADDRESS1&
                                        &ADDRESS2&

                                        Dear &NAME&:

                                        In reference to our conversation
                                        earlier today, I would like to meet
                                        with you as soon as possible. We
                                        must discuss^Ball^B possibilities of
                                        merging &COMPANY& and Heavy
                                        Dealing.

                                        Please call my secretary to set an
                                        appointment at your earliest con-
                                        venience.

                                        Sincerely,

                                        Jim Winters, President
                                        Heavy Dealing, Inc.

                                        P.S One item we have to be sure to
                                        cover when we get together is that
                                        plant we have over in &LOCAL&. I
                                        need to hear what you think about
                                        this. Keep in touch.

                                        JW/sl

.pa
```

Lesson 7
Margins, tabs, and centering

In this lesson you will learn how to align the text you are typing with tabs, margins, and centering.

First you will need to create a new document file:

1. When the "editing no file" menu appears, press D to create a document file.
2. When the prompt NAME OF FILE TO EDIT? appears, type Display and press RETURN.

Now you have a document file called "Display," and you are ready to begin entering text.

Centering Text

CTRL O C

The first word you are going to type is to be the title of this file. So you will want to center this word in the middle of the line:

1. Press RETURN three times to bring the title down from the top of the page.
2. Type "Display" next to the left-hand margin.
3. Press CTRL OC (^O^C) to center "Display." You will see the word shift to the middle of the screen.

Indenting Text

CTRL I

Now you are going to enter several paragraphs of text with indentations included for better appearance:

1. Press RETURN three times to leave two blank lines below the title.
2. Press CTRL I (^I) to move the cursor out to the first tab stop. (You can see the positions of the tabs that WordStar has set for you by looking at the ruler line below the menu. Each exclamation point (!) represents one tab stop.)
3. Now type the following paragraph:

WordStar displays a lot of information for the beginning user. Besides the display of text in the lower part of the screen, WordStar also displays **RETURN** **RETURN**

Lesson 15
Typing form letters
(MailMerge option only)

In this lesson you will learn how to transform an ordinary letter into a form letter, into which thousands of names and addresses can be inserted. Once you complete this lesson, you will be able to generate a large number of letters from one letter and a mailing list. (Your WordStar system must include the **MailMerge** option.)

Preparing the Matrix Letter

The first step in printing thousands of form letters is to prepare a "matrix letter," which contains generic names in place of actual names:

1. When the "editing no file" menu appears, press O to copy a file.
2. When the prompt NAME OF FILE TO COPY FROM? appears, type Letter and press RETURN. (This is the letter you typed in Lesson 3.)
3. When the prompt NAME OF FILE TO COPY TO? appears, type Mailing3 and press RETURN. (You have just made a copy of file "Letter" called "Mailing3.")

Eventually, you will print many letters that look just like "Letter." Now that you have a copy of it, you can modify this copy to produce the matrix letter. To do this, you begin by typing some preliminary instructions for WordStar:

1. Open a file called "Mailing3":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Mailing3 and press RETURN.
2. Make sure you see INSERT ON in the upper right-hand corner; if you don't, press CTRL V (^V).
3. Press CTRL N to create a blank line.
4. Type .. File: MAILING3 and press RETURN. (This tells you the name of your file.)
5. On the next blank line type .op and press RETURN. (This is to turn off page-numbering.)
6. On the third blank line type .df LIST3.DAT and press RETURN.(This is to tell WordStar the name of your data file, which you will be typing later.)
7. On the fourth blank line type .rv N,TITLE,COMPANY, ADDRESS1, ADDRESS2, NAME, LOCAL and press RETURN. (This tells WordStar what to read from your data file.)

With the instructions to WordStar completed, you can turn off insertion by pressing CTRL V (^V) and begin modifying the actual letter:

1. Replace the title line with &TITLE&:
   a. Move the cursor to the B in "Bill Somers, President."
   b. Type &TITLE& over the name and press CTRL QY (^Q^Y) to delete whatever is left on the line after "&TITLE&."
2. Replace the company line with &COMPANY&:
   a. Move the cursor down one line to the B in "Beauty, Inc.".
   b. Type &COMPANY& over the name and press CTRL QY (^Q^Y) to delete whatever is left over.
3. Replace the first address line with &ADDRESS1&:
   a. Move the cursor down one line to the 4 in "485 Avenida de las Guapas."
   b. Type &ADDRESS1& over the address and press CTRL QY (^Q^Y) to delete whatever is left over.
4. Replace the second address line with &ADDRESS2&:
   a. Move the cursor down one line to the L in "Los Angeles, California 90036."

4. Press CTRL I (^I) to move the cursor out to the first tab stop and type "o" to represent a **bullet.**
5. Press CTRL I (^I) again to move the cursor to the second tab stop.
6. Press CTRL OG (^O^G) twice to move the left margin temporarily to the second tab stop, then type the following paragraph:

   Status Line. The status line tells you the name of your file (B:DISPLAY), the page, line, and column of the cursor's location in your file, and other information, such as INSERT ON. **RETURN RETURN**

7. Repeat Steps 4-6 and type the following paragraph:

   Main Menu. The main menu gives you information about the most common WordStar functions and refers you to five other menus for additional information. **RETURN RETURN**

8. Repeat Steps 4-6 and type the following paragraph:

   Ruler Line. The ruler line shows you the margins and tab stops currently in effect. WordStar initially sets the left margin to column 1, the right margin to 65, and tab stops at every fifth column up to 56. **RETURN RETURN**

9. Press CTRL KD (^K^D) to save your file.

By pressing CTRL I (^I) one or more times, you can cause a line of text to be indented to one of the tab stops currently set. (But the rest of the lines of the paragraph will not be indented.) By pressing CTRL OG (^O^G) the same number of times, you can temporarily reset the left margin to the same tab stop, which means that the entire paragraph will be indented.

Printing Your File

Now you can print your file by following these steps:

1. When the "editing no file" menu appears, press P.
2. Make sure the printer is ready and that the paper is in the correct position.
3. When the prompt NAME OF FILE TO PRINT? appears, type Display, then press ESC (ESCAPE).

When printed, your file should look like this:

Display

WordStar displays a lot of information for the beginning user. Besides the display of text in the lower part of the screen, WordStar also displays

- Status Line. The status line tells you the name of your file (B:DISPLAY), the page, line, and column of the cursor's location in your file, and other information, such as INSERT ON.
- Main Menu. The main menu gives you information about the most common WordStar functions and refers you to five other menus for additional information.
- Ruler Line. The ruler line shows you the margins and tab stops currently in effect. WordStar initially sets the left margin to column 1, the right margin to 65, and tab stops at every fifth column up to 56.

3. When the prompt DISK FILE OUPUT (Y/N): appears, press RETURN to skip this question.
4. When the prompt START AT PAGE NUMBER (RETURN for beginning)? appears, type 2 and press RETURN.
5. When the prompt STOP AFTER PAGE NUMBER (RETURN for end)? appears, type 3 and press RETURN.
6. Press RETURN four more times to skip the remaining questions and start printing.

You can see from the page numbers that only pages 2 and 3 have been printed. Note that a RETURN after the START question means to start printing at the beginning of the file (page 1 in this case) and a RETURN after the STOP question means to print all the way to the end of the file (page 4 in this case).

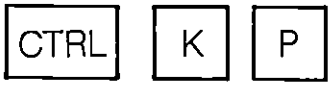
Pausing for Paper Changes

If your printer has a single-sheet feeder, you can try this feature with separate, hand-fed sheets. If not, you can just use continuous form and pretend the sheets are separated. Here are the steps:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT? appears, type DataStar and press RETURN four times.
3. When the question PAUSE FOR PAPER CHANGE BETWEEN PAGES (Y/N): appears, type Y and press RETURN four more times to start printing.

After printing one page, the printer will stop to give you time to insert the next page. As soon as the next page is ready, press P to continue printing. (If you forget, you can look at the "editing no file" menu, where you will see P=CONTINUE.)

Suspending a Print Job



You can suspend a print job before it has completed if necessary. Here is an exercise in how to suspend printing in progress:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT? appears, type DataStar and press ESC (ESCAPE).
3. After a few paragraphs have been printed, press P again. (You have just suspended printing.)
4. When the prompt TYPE "Y" TO ABANDON PRINT, "N" TO RESUME, U TO HOLD: appears, type N to resume printing (no RETURN required here).
5. After a few more paragraphs have been printed, press P again.
6. When the prompt appears, type Y to abandon printing.
7. Move the paper to the correct position if necessary.

You have just practiced two of the options available to you (resuming the print job and abandoning the print job). In this example, you started printing from the "editing no file" menu. You also could have started printing while you were in the middle of a file, as you will do in the next exercise:

1. Open the file "DataStar:"
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type DataStar and press RETURN.
2. Start printing:
   a. When the file appears on the screen, press CTRL KP (^K^P) to request printing.
   b. When the prompt NAME OF FILE TO PRINT? appears, type DataStar and press ESC (ESCAPE).
   c. As soon as the file starts to print, you will see the following message appear on-screen below the menu:

      WARNING:

      You are printing the same file as you are editing. The last saved version will be printed, not reflecting unsaved changes. Furthermore, WordStar will not allow you to save the edited version while the print is in progress.

      You will learn more about this later; right now, just go on to the next step.
3. Suspend, then resume, printing:
   a. After a few paragraphs have been printed, press CTRL KP (^K^P) to suspend printing.
   b. When the prompt TYPE "Y" TO ABANDON PRINT, "N" TO RESUME, ^U TO HOLD: appears, press CTRL U (^U) to hold printing.
   c. When the prompt "*** INTERRUPTED *** Press ESCAPE Key" appears, press ESC (ESCAPE).
   d. While the print job is holding, you can move the cursor around, delete text, add text, change margins, and reform paragraphs. (No changes will be included in the current print job, however.)
   e. Press CTRL KP (^K^P) to resume printing.
4. Abandon printing:
   a. After a few more paragraphs have been printed, press CTRL KP (^K^P) to suspend printing again.
   b. When the prompt appears (see Step 3b), press Y to abandon printing.
   c. Return the paper to the top-of-form position.
5. Press CTRL KQ (^K^Q) to abandon the file.

To summarize: After you suspend a print job, you may then do one of three things:

- Abandon the print job entirely
- Resume printing after making some checks
- Hold the print job while you perform some other WordStar tasks

Changing the Margins

To help you become more familiar with margin settings, you are now going to reprint your file with narrower margins:

1. Open file "Display" again:
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Display and press RETURN.
2. Change the left margin to 11:
   a. Press CTRL OL (^O^L) to change the left margin.
   b. When the prompt LEFT COLUMN NUMBER (ESCAPE for cursor column)? appears, type 11 and press RETURN.
3. Change the right margin to 56:
   a. Press CTRL OR (^O^R) to change the right margin.
   b. When the prompt RIGHT COLUMN NUMBER (ESCAPE for cursor column)? appears, type 56 and press RETURN.
4. Reform the first paragraph:
   a. Move the cursor to the first line of the first paragraph ("WordStar displays . . .").
   b. Press CTRL B (^B) to reform the paragraph.
5. Reform the second paragraph:
   a. After making sure INSERT ON is showing in the upper right-hand corner, move the cursor to the start of the second paragraph (to the bullet).
   b. Press CTRL I (^I) twice to push the bullet out to the first tab stop.
   c. Press CTRL F (^F) to move the cursor to the S in "Status Line."
   d. Press CTRL OG (^O^G) twice to reset the left margin temporarily to the second tab stop.
   e. Press CTRL B (^B) to reform the paragraph.
6. Repeat Step 5 for the third and fourth paragraphs, leaving all words unhyphenated.
7. Press CTRL KD (^K^D) to save a copy of your file.

Now your file should look like this:

Display

WordStar displays a lot of information for the beginning user. Besides the display of text and the lower part of the screen, WordStar also displays

- **Status Line. The status line tells you the name of your file (B:DISPLAY), the page, line, and column of the cursor's location in your file, and other information, such as INSERT ON.**
- **Main Menu. The main menu gives you information about the most common WordStar functions and refers you to five other menus for additional information.**
- **Ruler Line. The ruler line shows you the margins and tab stops currently in effect. WordStar initially sets the left margin to column 1, the right margin to 65, and tab stops at every fifth column up to 56.**

To print your file, follow these steps:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT? appears, type Display and press ESCAPE (ESC).

Restoring the Original Margins

To restore the original margins (column 1 and column 65), using a slightly different procedure, follow these steps:

1. Open file "Display" again:
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Display and press RETURN.
2. Restore the left margin:
   a. With the cursor resting in column 1, press CTRL OL (^O^L) to reset the left margin.
   b. When the prompt LEFT COLUMN NUMBER (ESCAPE for cursor column)? appears, press ESC (ESCAPE) to reset the left margin to column 1. (This is a second way to change a margin, and can be used any time.)
3. Restore the right margin:
   a. Press CTRL OR (^O^R) to reset the right margin.
   b. When the prompt RIGHT COLUMN NUMBER (ESCAPE for cursor column)? appears, enter 65 and press RETURN. (You will not be able to use the ESCAPE key this time because there is no way to move the cursor to column 65.)
4. Reform the first paragraph:
   a. Move the cursor to the first line of the first paragraph ("WordStar displays . . . ").
   b. Press CTRL B (^B) to reform the paragraph.
5. Reform the second paragraph:
   a. Move the cursor to column 1 of the first line of the second paragraph ("Status Line.").
   b. Press CTRL T (^T) to delete the spaces in front of the bullet. The bullet will jump to column 1.
   c. With INSERT ON showing, press CTRL I (^I) to push the bullet out to the first tab stop.
   d. Press CTRL F (^F) to move the cursor to the S in "Status Line."
   e. Press CTRL OG (^O^G) twice to

Lesson 14
Printing with headings and footings

In Lesson 13, you typed some text from a brochure, made copies of it, then printed the four copies as a four-page document. In this lesson you will print the same four pages with headings and footings. You will also learn how to print selected pages of a document, pause for paper changes, and suspend a print job in the middle.

Adding Page Headings .he

When you print a book, you often print the same heading at the top of each page. For example, you might print the title of the book or the title of a chapter. Just for practice, you can now add a heading to the document you typed in Lesson 13:

1. When the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type DataStar and press RETURN.
3. Make sure you see INSERT ON in the upper right-hand corner of the screen. If you don't, press CTRL V (^V) to make it appear.
4. Press CTRL N to create an extra blank line.
5. Now type, .he ^SMicroPro Brochure^S and press RETURN (use CTRL PS (^P^S) to insert the ^S underline characters).

The .he command is the heading command. It allows you to type in any one-line heading, using any special effects that you learned earlier in this guide. In a moment you will print your four pages again, but first you will get a chance to add a footing also.

Adding Page Footings .fo

WordStar also allows you to print from one character to a full line of text at the bottom of each page. For practice, you will print the page numbers on alternating sides of the page:

1. On the next blank line, type .fo ^K (use CTRL PK (^P^K) to enter the CTRL K (^K)).
2. Move the cursor out to column 69 (watch the column number on the status line at the top of the screen). (You can use CTRL I (^I) to tab most of the way.)
3. Type # for the page number.
4. Press CTRL KD (^K^D) to save a copy of your file.

You have just entered a simple footing. The .fo command is the footing command. It allows you to enter up to one line of text to be printed at the bottom of every page. The CTRL K that follows the space after .fo tells WordStar to remove the spaces between .fo and # on even-numbered pages (this is how the page numbers are from side to side).

If you would like to see this document on paper, you can print it on your printer:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT? appears, type DataStar and press ESC (ESCAPE).

You can see how the heading and footing you requested were printed at the top and bottom of each of the four pages, even though you typed them only once.

Printing Selected Pages

WordStar allows you to print only part of your file. For example, to print only pages 2 and 3 of "DataStar," you could follow these steps:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT appears, type DataStar and press RETURN (not ESCAPE).

move the left margin temporarily to the second tab stop.

f. Press CTRL B (^B) to reform the paragraph.

6. Repeat Step 5 for the third and fourth paragraphs.
7. Press CTRL KS (^K^S) to save your file.

Now the text should look the way it looked when you first entered it. Remember, new margins do not change existing text until you reform your paragraphs. New text that you are just entering is placed within the margins you now see on the screen on the ruler line. With the procedure described above, the text in the bulleted paragraphs will be left-justified with the paragraph title. If you want your paragraphs left-justified with the bullets, press CTRL OG once instead of twice in substep e.

Changing the Tabs

You have just changed margins from one pair of settings to another and back again. Now you will learn how to change the tab settings, using the same file. Begin by clearing some of the current tab settings:

1. Clear the tab stop in column 6:
   a. Press CTRL ON (^O^N) to clear a tab.
   b. When the prompt CLEAR TAB AT COL (ESCAPE for cursor col; A for all)? appears, type 6 and press RETURN.
2. Clear the tab stop in column 11:
   a. Move the cursor to column 11.
   b. Press CTRL ON (^O^N) to clear another tab.
   c. When the prompt CLEAR TAB AT COL (ESCAPE for cursor col; A for all)? appears, press ESC ESCAPE).

Now that you have cleared two of the old tab settings, you are ready to set two new tab settings:

1. Set a tab stop in column 4:
   a. Press CTRL OI (^O^I) to set a tab.
   b. When the prompt SET TAB AT COLUMN (ESCAPE for cursor column)? appears, type 4 and press RETURN.
2. Set a tab stop in column 8:
   a. Move the cursor to column 8 (the status line can help you find the column).
   b. Press CTRL OI (^O^I) to set another tab.
   c. When the prompt SET TAB AT COLUMN (ESCAPE for cursor column)? appears, press ESC (ESCAPE).
3. Look at the ruler line to see the new tab settings.

You have just used two methods for **clearing** tabs one at a time and the same two methods for **setting** tabs one at a time. One method is to enter a column number and press RETURN; the other is to position the cursor in the desired column ahead of time and then press ESC (ESCAPE). There is also a method for clearing all tabs at once:

1. Press CTRL ON (^O^N) to clear tabs.
2. When the prompt CLEAR TAB AT COL (ESCAPE for cursor col; A for all)? appears, type A to clear all tabs.
3. Look at the ruler line to see the result.

To restore the tabs again, you will have to restart WordStar:

1. Press CTRL KQ (^K^Q) to abandon the file.
2. When the "editing no file" menu appears, press X to stop WordStar.
3. When the operating system's prompt (A> or something similar) appears, type ws (or something similar) and press RETURN to start WordStar again.
4. Look at the ruler line to see the tab settings.

You have just set unconditional page breaks between each pair of articles. The .pa command is the unconditional page command. This command tells WordStar to cause a page break on the very next line. The line containing .pa is not counted by WordStar as a line of text.

If you would like to see this document on paper, you can print it on your printer:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT? appears, type DataStar and press ESC (ESCAPE).

When you look at the results, you will see that the pages have been numbered 1-4, with each number centered at the bottom of a page. (In this learning exercise, the four pages are the same; but in actual practice, you will be printing pages that are different.) If you would like to number the pages a different way (such as alternating from side to side), you will learn how to do this in Lesson 14.

Lesson 8
Typing tables

After learning how to set margins and tabs in Lesson 7, now you are ready to type some tables.

Typing a Simple Table

You will start by typing a simple table. Then you will type a more difficult table.

1. Open a new file called "Tables":
   a. When the "editing no file" menu appears, press D to create a document file.
   b. When the prompt NAME OF FILE TO EDIT? apears, type Tables and press RETURN.
2. Type the title of the table:
   a. When your new file is ready, type Table 8-1. Basic Cursor Movement Commands.
   b. Without moving the cursor, press CTRL OC (^O^C) to center the title.
3. Type the table headings:
   a. Press RETURN twice to leave a blank line, then type Command beginning at the left margin.
   b. Press CTRL I (^I) five times to move the cursor to the tab stop in column 31.
   c. Type Description and press RETURN.
4. Type the first table entry:
   a. Press RETURN again to leave a blank line, then type CTRL S beginning at the left margin.
   b. Press CTRL I (^I) once to move the cursor to the next tab stop (column 11).
   c. Press CTRL OG (^O^G) twice to move the left margin temporarily to the tab stop, and type the following description:

      Move the cursor back to the previous character, returning to the end of the preceding line if the cursor is at the beginning of a line. **RETURN** **RETURN**

5. Follow procedures similar to those given in Step 4 to type the other three items in the table:

CTRL D	Move the cursor ahead of the next character, going to the beginning of the next line if the cursor is at the end of a line. **RETURN** **RETURN**
CTRL E	Move the cursor up to the preceding line, staying in the same column if possible. **RETURN** **RETURN**
CTRL X	Move the cursor down to the next line, staying in the same column if possible. **RETURN** **RETURN**

DataStar

If you'd like one, easy, uniform way to enter, retrieve, and update all your records, you'll love DataStar. Why use sixteen different programs to handle sixteen different kinds of records . . . when you can turn to DataStar?

You pay for only one program, but you get the ability to enter, verify, update, and print all your records, whether they're address lists, inventories, invoice and order records, accounting and employee information, shipping and receiving data or anything else.

What's more, DataStar handles all that information just the way you want, because you set up the system so it makes sense for you and the way you do business.

You don't have to be a computer whiz to know and love DataStar. In fact, you don't have to know anything about computers . . . or even how to type. First of all, DataStar itself takes you on a short demonstration tour that shows you how easy it is to operate. Even better, you're told exactly what to do while you're doing it — with prompts right on the screen, whether you're making or filling out a "form."

You use simple commands on a keyboard that looks like an ordinary typewriter. And you use the DataStar manual that looks as though it's written in ordinary language — and is. Even if you don't know anything about computers, you can run DataStar right. You can't inadvertently affect, change, or wipe out any part of DataStar by making mistakes.

You can even install DataStar yourself. It's compatible with a wide range of microcomputers that run under CP/M or a CP/M-derived operating system... virtually any Z80 or 8080/8085 system.

The only computer forms you use are in plain and simple English. Because you design them. You don't have to translate all your current forms into exotic computer language that nobody understands. You don't have to translate them at all. If you wish, you can enter those forms into DataStar just the way they now look on paper.

Other systems may restrict the number and length of lines — or "fields," the overall size of the form, or your ability to change it or to create new forms. With DataStar, you can design virtually anything you want — even a form that's three times as long or three times as wide as the screen. And then change it whenever you have a better idea. **RETURN**
RETURN

Making Copies of the Article

With the text now typed, your next step is to make several copies of it for printing:

1. Mark the beginning of the block:
   a. Press CTRL QR (^Q^R) to return the cursor to the beginning of the file.
   b. Press CTRL KB (^K^B) to set a beginning marker.
2. Mark the end of the block:
   a. Press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL KK (^K^K) to set an end marker.
3. Without moving the cursor, press CTRL KC (^K^C) to copy the block of text (to make a duplicate copy). You now have two copies of the same text.
4. Repeat Step 3 two more times to make two more copies.
5. Press CTRL KH (^K^H) to hide the block markers and turn off the highlighting.

Setting an Unconditional Page Break .pa

Now you should have four copies of the text. However, if you move the cursor through the file, you will discover that the page breaks are not where you would like them to be. You would like each copy to appear on a separate page. Here is how you can make this happen:

1. Move the cursor to the first blank line below the first copy of the article (just below " . . . have a better idea.").
   a. Look at the status line to find the location.
   b. You will find this blank line on PAGE 1 at LINE 46.
2. Type .pa. (You will see the page divider jump to the line below .pa.)
3. Repeat Steps 1 and 2 for each of the remaining three copies of the article.
4. Press CTRL KD (^K^D) to save a copy of the file.

6. Press CTRL KD (^K^D) to save your file.

This completes the table. Now you can print it on your printer:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT? appears, type Tables and press ESC (ESCAPE).
3. This is how the table should look:

Resetting the Tab Settings

The next step is to reset the tabs for the new table:

1. Clear the old tabs:
   a. Press CTRL ON (^O^N) to clear tabs.
   b. When the prompt CLEAR TAB AT COL (ESCAPE for cursor col; A for all)? appears, type A and press RETURN.
   c. Look at the ruler line to see the result.

Table 8-1. Basic Cursor Movement Commands

Command	Description
CTRL S	Move the cursor back to the previous character, returning to the end of the preceding line if the cursor is at the beginning of a line.
CTRL D	Move the cursor ahead to the next character, going to the beginning of the next line if the cursor is at the end of a line.
CTRL E	Move the cursor up to the preceding line, staying in the same column if possible.
CTRL X	Move the cursor down to the next line, staying in the same column if possible.

Typing a Table with Decimal Amounts

Now you are ready to type a table with more columns and some decimal amounts in place of words. First you will need a file to work with:

1. When the "editing no file" menu appears, press D to create a document file.
2. When the prompt NAME OF FILE TO EDIT? appears, type Tables and press RETURN. (This is the same file you used for the other table.)
3. When the file appears on the screen, press CTRL QC (^Q^C) to move the cursor to the end of the file.
4. Press RETURN three times to leave a few blank spaces after the other table.
2. Set the new ordinary tabs:
   a. Press CTRL OI (^O^I) to set a new tab.
   b. When the prompt SET TAB AT COLUMN (ESCAPE for cursor column)? appears, type 8 and press RETURN.
   c. You have just set a new tab in column 8 (look at the ruler line).
   d. Follow procedures similar to those given in Steps 2a-c to set new tabs at columns 26, 36, 48, and 56.
3. Set the new decimal tabs:
   a. Press CTRL OI (^O^I) to set another new tab.
   b. When the prompt appears, type #39 and press RETURN.
   c. You have just set a decimal tab in column 39 (look at the # in the ruler line).
   d. Follow procedures similar to those given in Steps 3a-c to set decimal tabs in columns 51 and 60.

Typing the Table

Now you are ready to begin typing the table:

1. Type the title of the table:
   a. Type Table 8-2. Parts Orders next to the left margin.
   b. Without moving the cursor, press CTRL OC (^O^C) to center the title.
   c. Press RETURN twice to leave a blank line after the title.
2. Type the table headings:
   a. Beginning at the left margin, type Item.
   b. Press CTRL I (^I) to move to the next tab and type Description.
   c. Repeat steps similar to a and b for the rest of the column headings ("Part," "Price," "Qty," and "Amount").
   d. Press RETURN twice to leave a blank line after the column headings.

Lesson 13
Printing and pagination

In this lesson you will learn how to print a document longer than one page. This will involve telling WordStar where to make page breaks and how to format each printed page. You will also learn how to select the various printing options provided by WordStar, along with how to suspend, stop, or resume a printing job.

Setting a Conditional Page Break .cp

When you print a document longer than one page, you have to have a way to tell WordStar where to make page breaks. Otherwise, WordStar's automatic methods may break pages in undesirable places. One way you can do this is by setting a conditional page break:

1. When the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
3. When the file appears, press CTRL QC (^Q^C) to move the cursor to the end of the file, then back up a few lines to view the last paragraph.

You will see that the paragraph is split in half by a dashed line, with a P in the right-hand margin. This is WordStar's way of telling you that this is where WordStar is planning to break the first page. Suppose you decide that this isn't the best place to make a page break. This is how to tell WordStar to move the page break:

1. Move the cursor up to the blank line above the paragraph (the line above "**Combining Special Effects.**").
2. Make sure you see INSERT ON in the upper right-hand corner of the screen; if you don't, press CTRL V (^V) to make it appear.
3. Press RETURN to create a new blank line.
4. Type .cp5, and press RETURN. (You will see the page break marker jump up two lines.)
5. Press CTRL KD (^K^D) to save a copy of your file.

You have just moved the page break from the middle of the paragraph to the top of the paragraph. The .cp command is the conditional page command, which allows you to give WordStar a certain number of printed lines (in this case, 5). This command says to WordStar, "Keep the next five lines together. If they won't fit on this page, then move them all to the next page." The line containing the .cp command is not counted by WordStar as a line of text.
If you would like to see this document on paper, you can print it on your printer:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC (ESCAPE).

Typing an Article

Sometimes you need to have a page broken in a certain place, no matter what. For example, at the start of a new chapter, the title must be at the top of a new page, regardless of how much or how little text is printed on the previous page. To see how to set an unconditional page break, you will first have to type several new paragraphs of text:

1. When the "editing no file" menu appears, type D.
2. When the prompt NAME OF FILE TO EDIT? appears, type DataStar and press RETURN.
3. When the empty file appears, leave three blank lines and type the following text just as you see it here:

At this point, your table should look this:

Table 8-2. Parts Orders

Item	Description	Part	Price	Qty	Amount

Now you can type the body of the table a line at a time:

1. Type 1501.
2. Press CTRL I (^I) to move the cursor to the next tab and type Chair, easy.
3. Press CTRL I (^I) to move to the next tab and type 721C.
4. Press CTRL I (^I) **twice** to move to the first decimal tab and type 249.00 (watch the screen to see what happens).
5. Press CTRL I (^I) twice to move to the next decimal tab and type 7.
6. Press CTRL I (^I) twice to move to the last decimal tab and type 1743.00.
7. Press RETURN twice to leave a blank line.
8. Repeat Steps 1-7 to type the rest of the table:

1502	**Table, kitchen**	**682U**	**175.00**	**4**	**700.00**
1503	**Sofa, queen size**	**836L**	**535.00**	**19**	**10165.00**
1504	**Lamp, table**	**379H**	**85.00**	**24**	**2040.00**
1505	**Curio, odd**	**102Z**	**1.25**	**101**	**126.25**

9. Press CTRL KD (^K^D) to save a copy of your file.

Printing the Table

This completes the table. Now you can print it on your printer:

1. When the "editing no file" menu appears, press P.
2. When the prompt NAME OF FILE TO PRINT? appears, type Tables and press ESC (ESCAPE).
3. The table should appear as shown here.

Table 8-2. Parts Orders

Item	Description	Part	Price	Qty	Amount
1501	Chair, easy	721C	249.00	7	1743.00
1502	Table, kitchen	682U	175.00	4	700.00
1503	Sofa, queen size	836L	535.00	19	10165.00
1504	Lamp, table	379H	85.00	24	2040.00
1505	Curio, odd	102Z	1.25	101	126.25

4. To restore the original tab settings, restart WordStar:
   a. When the "editing no file" menu appears, press X to exit from WordStar.
   b. When the operating system's prompt (A> or something similar) appears, type ws (or something similar) and press RETURN.

Ordinary Tabs and Decimal Tabs

WordStar allows you to use two kinds of tab settings when you are typing a table: ordinary tabs and decimal tabs. Use ordinary tabs to align columns of text. (If a column of text takes more than one line, you can also use CTRL OG (^O^G) one or more times to move the left margin temporarily to the tab.) Use decimal tabs to align columns of numbers, whether the numbers actually have decimal points or not.

Extended Course

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Lesson 9
Creating special effects: Part 1

In this lesson, you will learn how to create a variety of special printing effects, such as boldface, double-striking, underlining, and strikeout. In Lesson 10, you will learn how to type subscripts, superscripts, strikeovers, and non-break spaces. With these features, you will be able to emphasize certain words, type titles of books, print new characters, type mathematical formulas, and so on. These two lessons are designed so that you may skip around. However, for your first time through, the complete text will be required for later lessons.

Before you can begin, you will need a file to work with:

1. When the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
3. When the file is ready, press CTRL PB (^P^B) followed by RETURN to go to the next line.
4. On the next line, type Special Effects, press CTRL OC (^O^C) to center the title, and press RETURN.
5. On the next line, press CTRL PB (^P^B) then RETURN twice.

Typing Boldface Text

CTRL P B

The titles and headings of a book are often printed in **boldface** type. The heading for this section is in boldface; so is the word "boldface" in this paragraph. You just typed the title for your file ("Special Effects") in boldface. Here is an exercise in typing boldface characters:

1. Press CTRL I (^I) to move the cursor to the first tab.
2. Press CTRL PB (^P^B), type Boldface Printing, and press CTRL PB (^P^B) again.
3. Type a period, leave two spaces, and type the following paragraph: "To produce boldface printing, press CTRL PB before and after the desired words. If the words are in a title, you can type the first CTRL PB on the line before the title and the second on the line after the title. If the words are within a paragraph of text, you can type the control characters immediately before and after the words."
4. Press RETURN twice after the last sentence to leave a blank line. What you have typed so far should look like this on the screen:

```
^B
                    Special Effects
^B
   ^BBoldface Printing^B. To produce boldface printing, press CTRL
PB before and after the desired words. If the words are in a
title, you can type the first CTRL PB on the line before the
title and the second on the line after the title. If the words are
within a paragraph of text, you can type the control
characters immediately before and after the words.
```

You can see the four ^Bs that WordStar has inserted into the text. (The word "CTRL" in the first line of text appears to be beyond the right margin because WordStar does not recognize the ^Bs as part of the text.) To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.
3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

Special Effects

Boldface Printing. To produce boldface printing, type CTRL PB before and after the desired words. If the words are in a title, you can type the first CTRL PB on the line before the title and the second on the line after the title. If the words are within a paragraph of text, you can type the control characters immediately before and after the words.

As you can see, the title of the file ("Special Effects") and the paragraph heading ("Boldface Printing") were both printed with thicker, darker letters. This is boldface printing. The special effects you are about to learn are all typed in just about the same way.

Double-Striking

CTRL P D

To produce printing in which each character is typed twice for double clarity, you can use double-striking. The characters will be sharper than ordinary characters, but not as thick as boldface characters. Here is an exercise in double-striking words in a paragraph:

1. Reopen the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
2. Position the cursor:
   a. When the file is ready, press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL I to move the cursor to the first tab.
3. Type the paragraph:
   a. Press CTRL PB (^P^B), type Double-Striking, press CTRL PB (^P^B) again, and type a period, followed by two spaces.
   b. Now type the following paragraph, using CTRL PD (^P^D) to double-strike the phrase "every word in the file": "To produce double-striking, press CTRL PD before and after the desired words. If you want to double-strike every word in the file, place one control character at the beginning of the file and one at the end."
4. Press RETURN twice to leave a blank line after the paragraph. This is how your paragraph should look on the screen:

^BDouble-Striking^B. To produce double-striking, press CTRL PD before and after the desired words. If you want to double-strike ^Devery word in the file^D, place one control character at the beginning of the file and one at the end.

End of the Intermediate Course

This concludes the Intermediate Course. By now you have learned most of WordStar's major features. Here is a brief summary of what you have learned:

Lesson 7. You learned to center text on a line and indent text using the tab stops. You also learned how to change the margins and tabs that WordStar provides automatically.

Lesson 8. You learned how to type tables using both ordinary tabs and decimal tabs.

Lesson 9. You learned how to type boldface, double-strike, underlined, and stricken text.

Lesson 10. You learned how to type subscripts, superscripts, strikeovers, and non-break spaces. In addition, you learned how to combine special effects and how to type two more special characters.

Lesson 11. You learned how to set place markers in a file and then move the cursor to them. You also learned how to search for a string and how to replace a string, along with several options (disregard case, search for whole words, automatic replace).

Lesson 12. You learned how to save your file (or not save it) in four different ways. You also learned how to mark a block to be moved, copied, deleted, or transferred to another file. Finally, you learned how to copy, rename, or delete an entire file, including how to restore a lost file from the backup copy.

So far you have created the following files:

PRACTICE (Lesson 2)
LETTER (Lesson 3)
CONTROL (Lesson 6)
DISPLAY (Lesson 7)
TABLES (Lesson 8)
SPECIAL (Lessons 9)
X (Lesson 12)
Y (Lesson 12)
Z (Lesson 12)

If you plan to repeat any of these lessons or you have no further use for these files, you may want to delete them now. If you plan to go on to the Extended Course, do not delete these files now — some of them will be used again.

WordStar has inserted a ^D before and after the words "every word in the file." To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.
3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

b. Now type the following paragraph, using CTRL PS (^P^S) to underscore the phrase "continuous underlining": "To produce underlining, press CTRL PS before and after the desired words. If you want continous underlining, make sure you type underscore characters between words. Otherwise, only the words themselves will be underscored and the spaces between the words will be blank."

Double-Striking. To produce double-striking, press CTRL PD before and after the desired words. If you want to double-strike every word in the file, place one control character at the beginning of the file and one at the end.

Underlining

CTRL P S

In this training guide, underlining is used to indicate items for you to type. For example, "Start WordStar by typing ws after A>." Here is an exercise in typing underlined words.

1. Reopen the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
2. Position the cursor:
   a. When the file is ready, press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL I to move the cursor to the first tab.
3. Type the paragraph:
   a. Press CTRL PB (^P^B), type Underlining, press CTRL PB (^P^B) again, and type a period, followed by two spaces.
4. Press RETURN twice to leave a blank line after the paragraph. This is how your paragraph should look on the screen:

^BUnderlining^B. To produce underlining, press CTRL PS before and after the desired words. If you want ^Scontinuous underlining^S, make sure you type underscore characters between words. Otherwise, only the words themselves will be underscored and the spaces between the words will be blank.

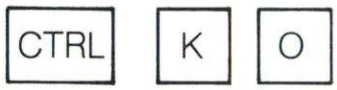
WordStar has inserted a ^S before and after the words "continuous underlining," but it is up to you to type the underscore character between the words if you want it printed.

To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.
3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

Underlining. To produce underlining, press CTRL PS before and after the desired words. If you want continuous underlining, make sure you type underscore characters between words. Otherwise, only the words themselves will be underscored and the spaces between the words will be blank.

Copying a File



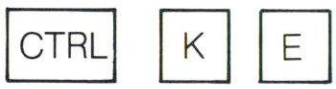
Now you will learn how to make a copy of a file:

1. When the "editing no file" menu appears, press O.
2. When the prompt NAME OF FILE TO COPY FROM? appears, type x and press RETURN.
3. When the prompt NAME OF FILE TO COPY TO? appears, type y and press RETURN.

WordStar will make a copy of file "x," called file "y." To verify this, look at your disk directory, which usually appears under the "editing no file" menu. You can also open file "y" to see that it is the same.

Note that you don't have to use the "editing no file" menu to copy a file. You can also use CTRL KO (^K^O) if you're in the middle of a file (it doesn't have to be the file you're copying).

Renaming a File



WordStar allows you to change the name of a file:

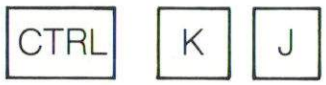
1. When the "editing no file" menu appears, press E.
2. When the prompt NAME OF FILE TO RENAME? appears, type x and press RETURN.
3. When the prompt NEW NAME? appears, type z and press RETURN.

WordStar will change the name of file "x" to file "z." File "x" no longer exists. You can verify this by looking at your disk directory, which usually appears below the "editing no file" menu. You can also look at the actual file:

1. When the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type z and press RETURN.
3. After glancing over the file, press CTRL KD (^K^D) to save a copy of it on disk.

Note that you don't have to use the "editing no file" menu to rename a file. You can also use CTRL KE (^K^E) if you're in the middle of a file (it doesn't have to be the file you're renaming).

Deleting a File



Finally, Wordstar allows you to delete any file you have entered:

1. When the "editing no file" menu appears, press Y.
2. When the prompt NAME OF FILE TO DELETE? appears, type z and press RETURN.

WordStar will delete file "z." You can verify this by looking at your disk directory, which usually appears below the "editing no file" menu.

Note that you don't have to use the "editing no file" menu to delete a file. You can also use CTRL KJ (^K^J) — not CTRL KY — if you're in the middle of a file (it doesn't have to be the file you're deleting). (Since Y is the "no-file" key for deleting a file, you may think that CTRL KY is the key sequence to use when you're in another file. But CTRL KY is for deleting a marked block.)

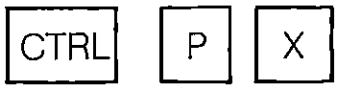
Restoring a Lost File from the Backup File

Any time you lose a file, you can restore it from the backup file that WordStar created the last time you saved a copy of it. For example, suppose you realized after deleting "z" that you really wanted to keep the file. You could restore "z" from "z.bak" as follows:

1. When the "editing no file" menu appears, press O.
2. When the prompt NAME OF FILE TO COPY FROM? appears, type z.bak and press RETURN.
3. When the prompt NAME OF FILE TO COPY TO? appears, type z and press RETURN.

WordStar will make a copy of "z.bak," called "z." You can verify this by looking at your disk directory. This new "z" will contain all the changes you made before the last time you saved it. You can make a copy of a backup file, but you can never edit the backup file itself.

Striking Out Words



Sometimes you need to show some words or sentences that you are deleting from your text. This is especially common in printing legal documents or the by-laws of an organization. Here is an exercise in striking words from the text:

1. Reopen the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
2. Position the cursor:
   a. When the file is ready, press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL I to move the cursor to the first tab.
3. Type the paragraph:
   a. Press CTRL PB (^P^B), type Strikeouts, press CTRL PB (^P^B) again, and type a period, followed by two spaces.
   b. Now type the following paragraph, using CTRL PX (^P^X) to strikeout the sentence beginning with "Any obsolete words . . .": "To produce a strikeout, press CTRL PX before and after the desired words. ~~Any obsolete words will then be stricken from the text in the printed copy~~.
4. Press RETURN twice to leave a blank line after the paragraph. This is how your paragraph should look on the screen.

3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

> **Strikeouts.** To produce a strikeout, press CTRL PX before and after the desired words. ~~Any obsolete words will then be stricken from the text in the printed copy~~.

Summary

You have now learned how to type boldface, double-strike, underlining, and strikeouts. This is how the file "Special" should look:

> **Special Effects**
>
> **Boldface Printing.** To produce boldface printing, press CTRL PB before and after the desired words. If the words are in a title, you can type the first CTRL PB on the line before the title and the second on the line after the title. If the words are within a paragraph of text, you can type the control characters immediately before and after the words.
>
> **Double-Striking.** To produce double-striking, press CTRL PD before and after the desired words. If you want to double-strike every word in the file, place one control character at the beginning of the file and one at the end.
>
> **Underlining.** To produce underlining, press CTRL PS before and after the desired words. If you want continuous underlining, make sure you type underscore characters between words. Otherwise, only the words themselves will be underscored and the spaces between the words will be blank.
>
> **Strikeouts.** To produce a strikeout, press CTRL PX before and after the desired words. ~~Any obsolete words will then be stricken from the text in the printed copy~~.

> **^BStrikeouts^B. To produce a strikeout, press CRTL PX before and after the desired words. ^XAny obsolete words will then be stricken from the text in the printed copy^X.**

WordStar has inserted a ^X before and after the second sentence of the paragraph. To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.

Deleting a Block

CTRL K Y

In the previous section, you made an extra copy of the four paragraphs that were marked. For practice you will delete one of them:

1. Press CTRL KH (^K^H) to make the block markers reappear on the screen.
2. Press CTRL KY (^K^Y) to delete the marked block. (It doesn't matter where the cursor is located.)
3. Press CTRL KQ (^K^Q) to abandon the file. (Now the block markers are gone.)

Pressing CTRL KY (^K^Y) allows you to delete a block of text that has been marked. The block is gone and so are the markers. (The block-hiding feature (CTRL KH) can be used to protect you from an accidental deletion.)

Writing a Block to Another File

CTRL K W

So far you have been handling blocks of text only within the same file. Now you will learn how to transfer a block out of the current file into another file. Here are the steps:

1. Reopen the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE EDIT? appears, type Special and press RETURN.
2. Set the beginning marker:
   a. When the file appears, move the cursor to the blank line above the first paragraph **("Boldface Printing").**
   b. Press CTRL KB (^K^B) to mark the beginning of a block.
3. Set the ending marker:
   a. Move the cursor down to the blank line between the fourth and fifth paragraphs (just above "**Subscripts**"). (CTRL C (^C) twice should do it.)
   b. Press CTRL KK (^K^K) to mark the end of this block.
4. Write the block to a temporary file named "x:"
   a. Press CTRL KW (^K^W) to request a block write.
   b. When the prompt NAME OF FILE TO WRITE MARKED TEXT ON? appears, type x and press RETURN.
5. Press CTRL KQ (^K^Q) to abandon "Special."

WordStar will write this block to a new file named "x." Now you will learn how to read the block from this new file into another file. (It's usually a good idea to give temporary files like x short, one-letter names to make them easy to use and easy to identify.)

Reading One File into Another

CTRL K R

In the previous section, you marked a block of text and then wrote it into a new file. Now you will read this new file into still another file:

1. Reopen the file "Control":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Control and press RETURN.
2. Read "x" into "Control":
   a. When the file appears, move the cursor down to the blank line between the two paragraphs.
   b. Press CTRL KR (^K^R) to request a file read.
   c. When the prompt NAME OF FILE TO READ? appears, type x and press RETURN.

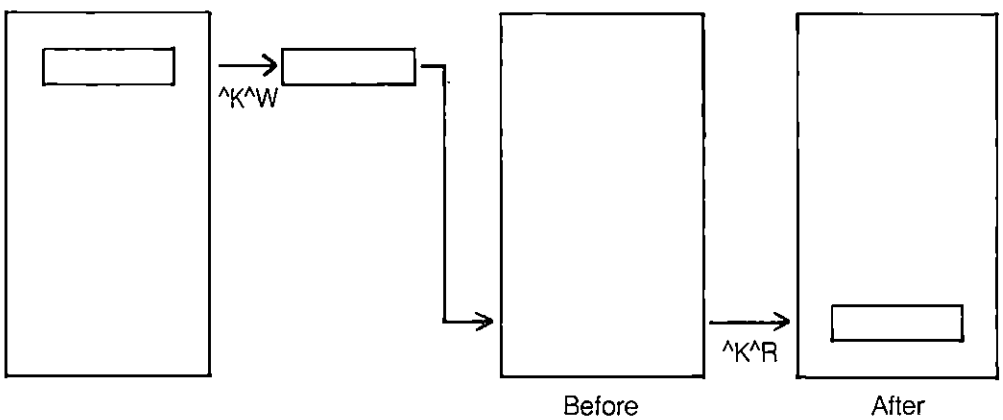
WordStar will read the entire contents of file "x" into file "Control." Scroll the screen up and down to check this. The four paragraphs of file "x," which originally came from file "Special," have been inserted into file "Control." This is how you copy text from one file to another. (You can press CTRL KQ (^K^Q) to abandon file "Control.")

Summary: Moving Text from One File to Another

The exercise you have just completed in the previous two sections illustrates how you copy text from one file to another. It's a two-step procedure in WordStar:

- First mark the block of text to be moved and write it to a temporary file.
- Then open the target file, position the cursor and read the text from the temporary file.

Now a copy of the text has been transferred from the original file to the target file via a temporary file, as shown in the following illustration:



Moving Text from One File to Another

Lesson 10
Creating special effects: Part 2

In this lesson we continue with subscripts, superscripts, strikeovers, and non-break spaces.

Typing Subscripts

CTRL P V

Subscripts are used in chemical notation and certain mathematical applications. Here is an exercise in typing subscripts:

1. Reopen the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
2. Position the cursor:
   a. When the file is ready, press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL I to move the cursor to the first tab.
3. Type the paragraph:
   a. Press CTRL PB (^P^B), type Subscripts, press CTRL PB (^P^B) again, and type a period, followed by two spaces.
   b. Now type, using CTRL PV (^P^V) before and after each number, "To type a subscript, press CTRL PV before and after the desired number. For example, H_2O is the chemical name for water. Here is a 'system of linear equations:'

      $a_1x + b_1y = c_1$

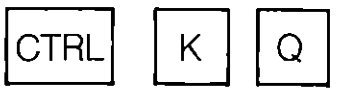
      $a_2x + b_2y = c_2$"
4. Press RETURN twice to leave a blank line after the paragraph. This is how your paragraph should look on the screen:

> **^BSubscripts^B. To type a subscript, press CTRL PV before and after the desired number. For example, H^V2^VO is the chemical name for water. Here is a 'system of linear equations:'**
>
> **a^V1^Vx + b^V1^Vy = c^V1^V**
>
> **a^V2^Vx + b^V2^Vy = c^V2^V**

5. After saving your file, you will find that WordStar is no longer running. Type a:ws (or just ws and press RETURN to restart WordStar.

Pressing CTRL KX (^K^X) allows you to save your file and exit from WordStar. Once you are out of WordStar, you may want to run utility programs under your computer's operating system. For example, your operating system probably has programs to check the amount of space left on your disk or to copy or delete files.

Abandoning a File



If you work on a file for a while and discover that you have made some big mistakes that you want to get rid of, you can abandon the file instead of saving it. By doing this, you retain your previous version of this file, which is still on disk (and which doesn't have the mistakes). You may also want to abandon a file that you have just opened by mistake.

1. When WordStar is running again and the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
3. Now you have an open file again. Suppose you have messed it up and want to get rid of it.
4. Press CTRL KQ (^K^Q) to abandon the file.

Pressing CTRL KQ (^K^Q) allows you to abandon a file that you don't want to keep. The next time you open the file with this name, you will get the previous version of it.

Marking a Block

WordStar allows you to move, copy, or delete a block of text of any size. The first step is to mark the beginning and end of the block that you want to deal with. Here is a sample procedure:

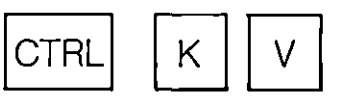
1. Open the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
2. Set the beginning marker:
   a. Move the cursor to the blank line above the first paragraph ("**Boldface Printing**").
   b. Press CTRL KB (^K^B) to mark the beginning of a block. (<**B**> will appear on the screen.)
3. Set the ending marker:
   a. Move the cursor straight down to the blank line between the fourth and fifth paragraphs (left-hand margin, just above "**Subcripts**").
   b. Press CTRL KK (^K^K) to mark the end of this block.
   c. If your screen has the capability, you will see the four paragraphs become highlighted.
   d. If your screen is not capable of highlighting, <**K**> will appear on the screen.

In Lesson 11, you learned how to move the cursor to any one of ten numbered markers. For your convenience, WordStar also allows you to move the cursor quickly to the block markers <**B**> and <**K**>:

1. Press CTRL QB (^Q^B) to move the cursor to the beginning marker <**B**>.
2. Press CTRL QK (^Q^K) to move the cursor to the ending marker <**K**>.

Now you are ready to deal with this block of text. (An easy way to remember these letters is to think of the word BlocK, which begins with **B** and ends with **K**.) One of the things you can do with the block is to move it to somewhere else in the file. The following section explains how to do this.

Moving a Block

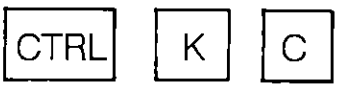


After typing your text, you may decide that a certain sentence, paragraph, or group of paragraphs belongs in a different location. WordStar allows you to move it as a block of text. For practice you will move the four paragraphs you just marked in the previous section:

1. Press CTRL QC (^Q^C) to move the cursor to the end of the file.
2. Press CTRL KV (^K^V) to move the four paragraphs to this location.
3. Now press CTRL QR (^Q^R) to return the cursor to the beginning of the file, then move it straight down to the blank line above the first paragraph ("**Subscripts**").
4. Press CTRL KV (^K^V) to return the four paragraphs to their original location. (The block markers are still in effect, even though you have already moved the block once.)

Pressing CTRL KV (^K^V) allows you to move a block of text from one location to another. After the move, the block will no longer be in the previous location. Another thing you can do with a marked block of text is to make a copy of it somewhere else in the file (or the same place). The next section explains how to do this.

Copying a Block



You may want to repeat a certain block of text in more than one place in your file. For practice, you will make a copy of the four paragraphs you marked in a previous section:

1. Press CTRL QC (^Q^C) to move the cursor to the end of the file.
2. Press CTRL KC (^K^C) to copy the four paragraphs to this location.
3. Press CTRL KC (^K^C) to make another copy. (The block markers remain in effect, even after you have copied the block. The markers remain until you save your file or mark another block of text.)
4. Press CTRL KH (^K^H) to hide the block markers. (This can sometimes be a helpful precaution.)

Pressing CTRL KC (^K^C) — after block markers have been set — allows you to make a copy of a block of text at the place where the cursor is currently located. The original block is not changed. Another thing you can do with a marked block is to delete it. The next section explains how to do this.

WordStar has inserted a ^V before and after each subscript. To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.
3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

> **Subscripts.** To type a subscript, press CRTL PV before and after the desired number. For example, H_2O is the chemical name for water. Here is a 'system of linear equations:'
>
> $$a_1x + b_1y = c_1$$
>
> $$a_2x + b_2y = c_2$$

Typing Superscripts

CTRL P T

Superscripts are used to flag footnotes in ordinary text and to represent exponents in mathematical equations. Here is an exercise in typing superscripts:

1. Reopen the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
2. Position the cursor:
   a. When the file is ready, press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL I to move the cursor to the first tab.
3. Type the paragraph:
   a. Press CTRL PB (^P^B), type Superscripts, press CTRL PB (^P^B) again, and type a period, followed by two spaces.
   b. Now type, using CTRL PT (^P^T) before and after each number, "To type a superscript, press CTRL PT before and after the desired number. For example, suppose we wanted to place a footnote at the end of this sentence.3 Here is one mathematical equation for a circle:
      $$(x - a)^2 + (y - b)^2 = r^2$$
4. Press RETURN twice to leave a blank line after the paragraph. This is how your paragraph should look on the screen:

> **^BSuperscripts^B. To type a superscript, press CTRL PT before and after the desired number. For example, suppose we wanted to place a footnote at the end of this sentence.^T3^T Here is one mathematical equation for a circle:**
>
> **(x - a)^T2^T + (y - b)^T2^T = r^T2^T**

WordStar has inserted a ^T before and after each superscript. To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.
3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

> **Superscripts.** To type a superscript, press CTRL PT before and after the desired number. For example, suppose we wanted to place a footnote at the end of this sentence.3 Here is one mathematical equation for a circle:
>
> $$(x - a)^2 + (y - b)^2 = r^2$$

Lesson 12
Handling blocks and files

In this lesson you will learn the different ways you can save your file after a typing session; you will learn how to mark a block of text to be moved, copied, or deleted; and you will learn how to move, copy, delete, or rename an entire file.

In Lesson 1 you learned that it is important to save the file you are working on fairly often to avoid losing text. In this lesson you will practice the four ways of saving (or not saving) your file after a session of typing.

Saving Your File and Continuing

CTRL K S

If you are going to spend a lot of time on a typing job, you should interrupt the job from time to time to save your file, then resume work. (Remember, no text is saved until you request to have it saved, and until it is saved, it can be lost.) Here is an example of the procedure:

1. When the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type Control and press RETURN.
3. Now you have an open file. In a real typing situation, you would be spending some time with this file. For now, assume you have been working with the file for a while, and move the cursor to the middle of the file.
4. Press CTRL KS (^K^S) to save the file.
5. After a short time (and some noises from your disk drive), you will see your file return to the screen.
6. Press CTRL QP (^Q^P) to return the cursor to where it was before you saved the file.

Pressing CTRL KS (^K^S) allows you to save a copy of your file on disk, then continue typing where you left off. Now leave your file just the way it is for the next exercise.

Saving Your File and Going to Another WordStar Operation

CTRL K D

If you have completed work on one file and you plan to do something else with WordStar (like opening another file or printing the same file), you can save the file and return to the "editing no file" menu:

1. With file "Control" still open from the previous exercise, press CTRL KD (^K^D) to save the file.
2. Again, the file is saved, but this time WordStar displays the "editing no file" menu instead of the file after the save.

Pressing CTRL KD (^K^D) allows you to save your file and go to another file or begin another WordStar operation.

Saving Your File and Stopping WordStar

CTRL K X

If you have completed work on your file and you are also completing a session with WordStar, you can save your file and exit from WordStar at the same time:

1. When the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
3. Now you have an open file from which to exit.
4. Press CTRL KX (^K^X) to save your file and exit from WordStar.

Typing Strikeovers

CTRL P H

WordStar allows you to print more than one character in the same position, so that you can form new characters by combining the ordinary ones. For example, you could combine c and | to form a cent sign or you could combine a special symbol with a letter to form an accented letter in a foreign language. Here is an exercise in typing strikeovers:

1. Reopen the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
2. Position the cursor:
   a. When the file is ready, press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL I to move the cursor to the first tab.
3. Type the paragraph:
   a. Press CTRL PB (^P^B), type Strikeovers, press CTRL PB (^P^B) again, and type a period, followed by two spaces.
   b. Now type, using CTRL PH (^P^H) and an apostrophe after the first e in fiancee, "To type a strikeover, press CTRL PH between any two characters. For example, you could type ' over the first e to print the French word "fiancée."".
4. Press RETURN twice to leave a blank line after the paragraph. This is how your paragraph should look on the screen:

WordStar has inserted a ^H between the pair of characters to be combined. To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.
3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

> **Strikeovers.** To type a strikeover, press CTRL PH between any two characters. For example, you could type ' over the first e to print the French word "fiancée."

Typing Non-Break Spaces

CTRL P O

Suppose you are typing about a product called "Tempo III," and you want to be sure that WordStar never splits this name at the end of a line. WordStar allows you to type a special space between "Tempo" and "III" that will prevent the two from being split by a line break. Here is an exercise in typing non-break spaces:

1. Reopen the file "Special:"
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.
2. Position the cursor:
   a. When the file is ready, press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL I to move the cursor to the first tab.
3. Type the paragraph:
   a. Press CTRL PB (^P^B), type Non-Break Spaces, press CTRL PB (^P^B) again, and type a period, followed by two spaces.
   b. Now type, using CTRL PO (^P^O) before "IV" and "XII," "To type a non-break space between two words, press CTRL PO instead of the space bar whenever you type these two words. WordStar will make sure the words are always kept together. Here are some examples: MasterSort IV, Spinout XII."

^BStrikeovers^B. To type a strikeover, press CTRL PH between any two characters. For example, you could type ' over the first e to print the French word "fiance^H'e."

Automatic Replacement

Option N

All the options for finding a string may also be used for replacing a string. There is also an additional option you can request to have WordStar skip the REPLACE (Y/N) prompt and make all replacements automatically:

1. With the cursor at the beginning of file "Special," press CTRL QA (^Q^A) to request replacement.
   a. When the prompt FIND? appears, type numbers and press RETURN.
   b. When the prompt REPLACE WITH? appears, type words and press RETURN.
   c. When the prompt OPTIONS? appears, type GN and press RETURN. (The GN tells WordStar to make all replacements without asking.)
2. This time WordStar will move quickly through your file and replace each occurrence of "numbers" with "words."
3. Press CTRL KQ (^K^Q) to "abandon" this file.
   a. In response to the prompt ABANDON EDITED VERSION OF FILE A:DISPLAY ? (Y/N) ■, type Y (no RETURN necessary).
   b. The file will be abandoned.

You can abandon a file any time you don't want to keep the results of your most recent session.

Summary

In this lesson you have learned how to set place markers anywhere in your file and then move the cursor to one of these markers. You press CTRL K (^K) and a number to set a place marker; you press CTRL Q (^Q) and a number to move the cursor to one of these place markers.

You have also learned how to search for words, phrases, or other strings in your file. You press CTRL QF (^Q^F) to begin a search to find a string; you press CTRL QA (^Q^A) to begin a search to replace a string. Two of the options available for either find or replace are to disregard the difference between upper and lower case (option U) and to search only for whole words (option W). Another option available only for replace is to make an automatic replacement without asking (option N).

Additional options are also available during a search. These are described in other WordStar publications.

4. Press RETURN twice to leave a blank line after the paragraph. This is how your paragraph should look on the screen:

> ^BNon-Break Spaces^B. To type a non-break space between two words, press CTRL PO instead of the space bar whenever you type these two words. WordStar will make sure the words are always kept together. Here are some examples: MasterSort^0IV, Spinout^0XII.

WordStar has inserted a ^0 between "MasterSort" and "IV" and between "Spinout" and "XII." (Without the non-break space, "Spinout" would have stayed on the fourth line, with "XII" on the fifth line. To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.
3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

> **Non-Break Spaces.** To type a non-break space between two words, press CTRL PO instead of the space bar whenever you type these two words. WordStar will make sure the words are always kept together. Here are some examples: MasterSort IV, Spinout XII."

Combining Special Effects

In Lessons 9 and 10 you have learned to create a variety of special effects with WordStar: boldface characters, double-strike characters, underlined text, stricken text, subscripts, superscripts, strikeovers, and non-break spaces. So far you have tried these features only in separate examples. However, you are free to combine them in almost any way you can imagine. You can have a boldface subscript, an underlined superscript, a multiple strikeover, and so on. Here is an exercise in combining special effects:

1. Reopen the file "Special":
   a. When the "editing no file" menu appears, press D.
   b. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.

Finding a String

CTRL Q F

In computer language, a "string" isn't something you tie around your finger; it's a sequence of characters, which may or may not form a word or phrase. WordStar makes it easy for you to find any word, phrase, or string of up to 30 characters with a simple command.

1. With the file "Special" still open, press CTRL QR (^Q^R) to return the cursor to the beginning of the file.
2. Press CTRL QF (^Q^F) to request a search.
3. When the prompt FIND? appears, type words and press ESC (ESCAPE).
4. The cursor will come to rest after the s in "words" in the second line of the first paragraph.
   a. If this is what you are looking for, you can note the location, make corrections, and so on.
   b. If this is not what you are looking for, you can ask WordStar to go on to the next one (Step 5).
5. Press CTRL L (^L) to move the cursor to the next occurrence of "words."
6. Keep pressing ^L until the NOT FOUND message appears (*** NOT FOUND *** words *** Press ESC Key ***). This message tells you that WordStar could not find another occurrence of "words." You have two options:
   a. To return to the last occurrence of "words," press ESC (ESCAPE), then CTRL QV (^Q^V).
   b. To return to the beginning of the file, press ESC (ESCAPE), then CTRL QR (^Q^R).

You have just completed a simple, unconditional search. Now repeat Steps 1-6, substituting "under" for "words." Note that WordStar found "underlining," "underlining," "underscore," and "underscored" in the third paragraph. This shows that you can look for a prefix (or suffix) of a word without having to know the rest of the word. (Soon you will learn how to specify only the word "under" by itself.)

Disregarding Case

Option U

If you look closely at the third paragraph, you will see that WordStar missed one occurrence of "under"—the "under" in the paragraph heading "Underlining." WordStar skipped this not because it was boldface, but because the U was capitalized. Here is how you can correct that:

1. Press CTRL QR (^Q^R) to move the cursor to the beginning of the file.
2. Press CTRL QF (^Q^F) to request a search.
3. When the prompt FIND? appears, type under and press RETURN (instead of ESCAPE).
4. This time another prompt will appear (OPTIONS?). Now type U and press RETURN. (The U tells WordStar to disregard the difference between upper case and lower case letters.)
5. Now WordStar will stop at the paragraph heading "Underlining."

Searching for Whole Words

Option W

In the simple search for "under," recall that WordStar found words that contained "under," but not the word itself, since there was none to be found. Now you will learn how to ask WordStar to search only for the word itself:

1. With the file "Special" still open, press CTRL QC (^Q^C) to move the cursor to the end of the file.
2. Type this sentence: "Under the last paragraph on special effects you will find this sentence all by itself."
3. Press CTRL QR (^Q^R) to return the cursor to the beginning of the file.
4. Press CTRL QF (^Q^F) to request a search.
   a. When the prompt FIND? appears, type Under and press RETURN.
   b. When the OPTIONS? prompt appears, type W and press RETURN. (The W tells WordStar to look only for a whole word.)
5. WordStar will stop at the word "Under" at the beginning of the sentence you just typed; it will not stop at "Underlining" or "underscore."

You have tried two find options so far, U (disregard the difference between upper and lower case letters) and W (search only for whole words). You can also combine options in any order. Repeat Steps 1-6, this time typing "under" after FIND and either UW or WU after OPTIONS? in Step 6.

Replacing One String with Another

CTRL Q A

WordStar also allows you to search for a string, then replace it with another string. This can help you when you need to change one word to another in your file:

1. With the file "Special" open, press CTRL QR (^Q^R) to return the cursor to the beginning of the file.
2. Press CTRL QA (^Q^A) to request a replace.
   a. When the prompt FIND? appears, type words and press RETURN.
   b. When the prompt REPLACE WITH? appears, type numbers and press ESC (ESCAPE).
3. The cursor will come to rest after the s in "words" in the second line of the first paragraph, with this prompt displayed above: REPLACE (Y/N): ■
   a. Type Y to allow the replacement.
   b. Press CTRL L (^L) to continue.
4. When the REPLACE (Y/N) prompt appears, type Y. (Continue in this way until you have replaced all occurrences of "words" with "numbers.")
5. When the NOT FOUND message appears, press ESC (ESCAPE), then CTRL QR (^Q^R).

You have just completed a manual replacement. A manual replacement allows you to look at each occurrence of the string and make a decision about whether you want to replace it. If you are absolutely certain that you want every occurrence replaced, you can ask WordStar to perform an automatic replacement, which is much faster.

2. Position the cursor:
   a. When the file is ready, press CTRL QC (^Q^C) to move the cursor to the end of the file.
   b. Press CTRL I to move the cursor to the first tab.
3. Type the paragraph:
   a. Press CTRL PB (^P^B), type Combining Special Effects, press CTRL PB (^P^B) again, and type a period, followed by two spaces.
   b. In this paragraph, use boldface, subscript, strikeover, and superscript in the appropriate places to produce the special effects. Now type, "To combine special effects, simply insert one control character after another. For example, your **WordStar**™ cursor may look like this: ■. [Use H, I, N, and Z.]

      $| \mathbf{a} | = / (a_x^2 + a_y^2 + a_z^2)$"
4. Press RETURN twice to leave a blank line after the paragraph. This is how your paragraph should look on the screen:

```
^BCombining Special Effects^B. To combine special effects,
simply insert one control character after another. For example,
your ^BWordStar^B^VTM^V cursor may look like this: H^HI^HN^HZ.

|^Ba^B| = /(a^Vx^V^T2^T + a^Vy^V^T2^T + a^Vz^V^T2^T)
```

WordStar has inserted many control characters. To see how this will look on paper, print this file on your printer:

1. Press CTRL KD (^K^D) to save your file on disk.
2. When the "editing no file" menu appears, press P.
3. When the prompt NAME OF FILE TO PRINT? appears, type Special and press ESC.
4. This is how this paragraph should look:

Combining Special Effects. To combine special effects, simply insert one control character after another. For example, your **WordStar**™ cursor may look like this: ■.

$| \mathbf{a} | = / (a_x^2 + a_y^2 + a_z^2)$

Lesson 11
Finding and replacing text

In this lesson you will learn how to set place markers in your file - markers to which you can later return. You will also learn how to search for a given word in your file, and if necessary to replace it with another word.

First you will need a file to work with:

1. When the "editing no file" menu appears, press D.
2. When the prompt NAME OF FILE TO EDIT? appears, type Special and press RETURN.

Setting Place Markers

CTRL K n

Now that you have an open file, you can set place markers in different locations:

1. Set place marker number 1:
   a. Move the cursor to the blank space in front of the heading "Double-Striking" (second paragraph).
   b. Press CTRL K1 (^K1). (You will see <1> appear highlighted where the cursor was. Don't be concerned when you see the text get pushed to the right.) You have just set place marker number 1 in front of this paragraph.
2. Set place marker number 2:
   a. Move the cursor to the blank space right after "Strikeouts" (fourth paragraph).
   b. Press CTRL K2 (^K2). (You will see <2> appear.) You have just set place marker number 2.
3. Set place marker number 3:
   a. Move the cursor to the blank space after "r^2" in the equation (sixth paragraph).
   b. Press CTRL K3 (^K3). (You will see <3> appear.) You have just set place marker number 3.

You can set as many as ten place markers in a single file by pressing CTRL K, followed by a single digit (0-9). (The markers do not have to be in numerical order.) You can then return the cursor to any of these locations very quickly.

NOTE

You must release the CTRL key before pressing any number key.

Moving to Place Markers

CTRL Q n

Now that you have three place markers set in your file, you can move the cursor to any one of them at any time:

1. Press CTRL Q2 (^Q2) to move the cursor to place marker number 2.
2. Press CTRL Q3 (^Q3) to move the cursor to place marker number 3.
3. Press CTRL Q1 (^Q1) to move the cursor to place marker number 1.

You can move the cursor to any place marker that you have already set by pressing CTRL Q, followed by the number of the marker. It probably doesn't need to be said, but you can't move the cursor to a marker that you haven't set.

Turn book around to begin Lesson 11.

SANYO ELECTRIC CO., LTD.

Printed in Japan Apr. 1983 9376411910100